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THE PREVENTION OF ECLAMPSIA.

By HENRY J. KREUTZMANN, M. D., Professor of Gynecology San Francisco Polyclinic, Gynecologist to German Hospital, Etc.

Read at Meeting of the San Francisco County Medical Society, August, 1900.

The science and art of obstetrics has made great progress during our time, and has been rendered one of the most satisfactory and successful branches of modern medicine. We owe this, in the very first place, to the genius of Semmelweis, the discoverer of the cause and nature of puerperal fever. Through his discovery, and through his preventive measures the terrors of "fever in child-bed" have been banished forever from our lying-in women. At first vigorously antagonized, his teachings are now universally accepted.

Another menace to the life of the parturient to which many succumbed in former years, hemorrhage, has also disappeared. The progress of gynecology was not lost to the obstetrician, and we have learned to treat surgically and successfully the wounds and injuries of the genital tract; also the post-partum hemorrhage from atonia uteri, so formidable in appearance, is now conquered with safety and certainty through Duhrssen's intrauterine tamponade.

Still there remain other dangers to life and health of parturient and puerperal women, always tragic and lamentable; such as sudden death from embolism. One of the most dreaded menaces to the life of parturient women, eclampsia, is fortunately not so very frequent in its occurrence, but is especially feared since in so many instances it appears without

any previous warning in heretofore apparently perfectly healthy women, and since too many valuable lives are still lost, notwithstanding great efforts to save life may have been made. Is it possible to prevent the outbreak of eclampsia? Since the mortality from eclampsia is quite high yet, it will certainly appear justifiable to call attention again to such measures as will prove of value in preventing eclampsia. I have recently had under my care a case where I expected almost with certainty the outbreak of eclampsia inter-partum, and where certain measures were adopted which in my opinion, prevented the occurrence of the eclampsia attacks. I know very well that we must not draw conclusions from a single case; that also without these measures eclampsia might not have occurred in this particular case; I make my remarks only under this reservation of mind. On the other hand, what I want to say does not contain anything new; all the different steps and measures have been advocated before, but under the fresh impression of the following case, I would like to emphasize the importance and value of what I have done, successfully as I believe, in this particular case.

HISTORY OF THE CASE.

Mrs. X, 32 years of age, prima para. Patient was seen early during pregnancy. As a young girl she had scarlet fever and for a long time afterwards was suffering from nephritis, but recovered fully from the latter. At an early date it was found that the urine contained albumen and casts which disappeared after a diet of milk and selters water. Patient got along otherwise very well. Albumen and

casts came back again later, that is to say, albumen was constant, casts were occasionally found. Swelling of feet and hands was quite noticeable. Urine was always excreted in large quantities. Confinement was expected in the beginning of August.

July 26-27, 1899. During the night patient woke up feeling a gush of water escaping from her; absolutely no pains noticed.

July 27th. Patient seen at about 8 a. m. There was an escape of water (amniotic fluid). Examination shows abdomen quite distended; tender on touch. Baby living; L. O. A. position. Internal examination shows cervix intact; the external os closed; head balloting over the entrance of pelvis. During the day, off and on, labor pains were felt. During the night of the 27th-28th labor pains prevented the patient from sleeping.

July 28th. During the day no labor pains were felt, at least only at great intervals. Examination in the morning shows cervix obliterated; the os open for the finger.

July 28th-29th. Patient got very little rest during the night.

July 29th. Examination shows slow progress. No membranes presenting. Head presses on the pelvic inlet.

July 30th. During the day frequent short pains noticed. In order to give the patient a rest, a mixture of bromide of potash and chloral hydrate, one gram each, and of morphin one centigram to the dose, was given. This afforded the patient some rest and sleep and the pains were less nagging. She had some rest during the day, but did not sleep much during the following night.

July 31st. Head presents itself a little more in the pelvis. Os dilated to the size of a silver dollar. Pains are lasting longer. The sensation of pain is some-

what controlled by the medicine. Slow progress of dilatation and of descensus of the head. In the evening of the 31st the patient was very restless, Dr. MacDonald kept up a slight narcosis of chloroform between 9 p. m. and 3 a. m. Chloroform has the effect that the pains after some time cease entirely, and that the patient falls soundly asleep.

August 1st. When I saw her at about 3 a. m. the patient was asleep. At 7 a. m. labor pains set in strongly at long intervals. Patient was willing to bear the pains in order to get through. No more chloral mixture was administered; this was replaced by hydrochloric acid solution with acetate of potash. There was still a little seam left of the cervix; the head was coming more and more into the pelvic cavity.

Pains for some time grew very strong. Patient had the sensation as if she must bear down, and she helped a good deal. The os was fully dilated and the head entered fully into the pelvis by noon. Patient suffered a great deal of pain at this time. Chloroform was given because at several times she showed signs of convulsive movements of the face; because her mind seemed to be a little affected from the long suffering. Chloroform had the effect that she became entirely perverted in her mind. It was administered to a slight extent only, and she helped to bear down. Heart-beats of the baby which had always been controlled, grew weaker. At 4 p. m. it was found that the heart-beats of the fetus became very faint and irregular. Head was then pressing on the pelvic floor; if the labia were separated it could be seen. No progress was noticeable for some time. The head was in good position; occiput in front. A little amniotic fluid escaped with examination; it looked green and discolored; labor pains had become irregular and ineffective. It was

then decided to deliver the woman with forceps: first, because there was no progress; secondly, because the life of the baby was decidedly in danger. Patient therefore fully narcotized; urine drawn; parts thoroughly cleansed. Forceps, Simpson's, easily applied, and without great difficulty the head delivered. It took considerable chloroform to get the patient fully under the influence of the anesthetic which was required for the manipulations, on account of her very great sensitiveness to touch. She still bore down, and when the head was extending the vulva to its greatest extent, she pressed a great deal and the head was delivered with a little force and rapidity. Perineum then gave way, shoulders were freed and the body was delivered. The cord was found to be pulsating weakly and irregularly; it was immediately tied. Baby was limp, white, and the heart was beating at great intervals. There was no respiration. It took some time before the baby was restored to life and made efforts to breathe and to cry. The after-birth came away about an hour after the delivery of the baby; it was delivered by Credé manual; it came away with the membranes, entire. There had occurred a tear of the vagina through the perineum on the right side close to the sphincter ani. Wound carefully exposed, cleansed, and brought into apposition with a number of silk sutures while the patient was still under the influence of the chloroform. Then the patient was cleansed and put to bed. Before labor, an examination of the pelvis had been made, and it was found that the measurements were as follows: Spin. ant. sup. 22 (25); crist. oss. il. 26 (28); dist. trochant. 31 (31); conjug. ext. 20 (20). Urine had been examined before and during the labor, and it was found to contain a good deal of albumen; it was concentrated; quantity had been medium

at first. It had been made a special object to have the kidneys work well. Milk and selters were given freely with the result that a large quantity of urine was afterwards always excreted. Much care was taken to have the bowels evacuated frequently. Besides, two warm baths were given daily.

I have given the history of this case extensively in order to show cause why I could reasonably expect eclampsia during parturition. The woman is an elderly prima para with a slightly contracted pelvis. There was present albumen (0.1 per cent Esbach), casts, and edema of the hands and feet. In this connection I must mention also the fact that the membranes ruptured before the labor pains set in and before a trace of dilatation of the cervix had taken place. This occurrence, together with the fact that the head had not descended into the pelvic cavity before the beginning of labor, as is usual with primi parae, has decidedly rendered the confinement at the same time tedious and very painful. The conditions therefore, were decidedly favorable for the development of eclamptic seizures, but in my estimation the latter were prevented by different measures, every one of which had for its object to rid the organism of the parturient of eclampsia-producing ptomaines; these measures were, stimulation of the action of the kidneys, of the bowels, and of the skin.

A great deal has been written lately about eclampsia of the parturient, especially about the true nature of the disease, but so far we are still on the ground of theoretical speculation; nothing definite has been found, either in pathological, or bacteriological, or chemical researches. Pathological changes in women dead from eclampsia, are found in almost every organ of the body; the most prominent ones are met in the kid-

neys, such as parenchymatous, or interstitial nephritis, necrosis of the cortical epithelium, fatty embolism, hemorrhagic and necrotic shreds, etc. In connection with the discovery by Lever of albumen in the urine of eclamptics, the theory of uremic origin of eclampsia was formulated by Frerichs. According to him, eclampsia occurs only in women suffering from nephritis, and is the result of uremic intoxication. This theory had to be abandoned when quite a number of cases were reported where eclampsia was present without albumen in the urine, and without such pathological change of the kidneys as would indicate inflammation. The fact that in some instances of pregnant women, one or both ureters were found to be compressed or twisted, has led Halbertsma of Leyden, Holland, to contend that pressure upon the ureters and consequent retention of urine in the kidneys produces eclampsia; but this theory is not much in favor at present, since the condition of pressure is present in all pregnant women, and since in tumors of the female genital organs pressure upon the ureters with dilatation of the same is *de facto* frequently found, yet eclampsia is not observed in all pregnant women, and never in women with tumors. In later years great stress has been laid, especially by French writers, Pinard, Bouffe, etc., upon the changes in the liver, such as thromboses and hemorrhages found in the liver of the eclamptic dead. It is argued that these pathological changes denote a severe affection of the liver; that the liver in this condition ceases to produce those substances ordinarily produced, which render harmless the toxins of the alimentary canal. Eclampsia is accordingly produced indirectly through the diseased condition of the liver; the complexity of symptoms is called *hepatotoxemie*. Against the general adoption

of this hepatogenic origin of eclampsia, has been brought forward the fact that not by any means are found severe or characteristic changes in all eclamptic livers which had been carefully examined; it has been stated that these changes were the consequences of traumatism, which the eclamptic sustained during the violent seizures; and, thirdly, those changes in the liver as well as in the kidneys are considered secondary, as produced by certain poisons of which a few words will be said later. At several times bacteriologists, G. Blanc, Gerdes, etc., thought they had found the specific eclampsia-bacillus, but this specific bacillus turned out to be some harmless bacillus such as are found in tissue undergoing decomposition, *proteus vulgaris*.

A more fruitful source for the explanation of the nature of eclampsia seems to have been found by the researches of the blood, and the different substances of secretion of the body. Already in 1886, Stump mentioned the possibility of autointoxication in eclampsia from findings of eclamptic livers, which resemble very much the liver of acute phosphorus intoxication. But credit is due for the development and propagation of these researches to Bouchard and other French scientists.

A few striking results of their researches may be cited. The urine of eclamptics is three times less poisonous than the urine of healthy women; the blood of eclamptic women is more poisonous than the normal; which goes to show that in eclampsia large quantities of poisonous material are not removed from the organism but are retained. To find the true nature of this somewhat vaguely called "poisonous material," many investigations have been, and are constantly made, but the eclampsia question remains as yet unsolved as far as

this substance is concerned. It appears however certain that these poisons are originated in the organism through the metabolism of tissue; there is present in the gravid organism less oxidation of nitrogenous substances than in the normal; the transformation of nitrogenous bodies into the highest excretable forms, is not going on as freely as in health; the result is that the intermediate, lower forms of N-metabolism remain in the body, such as kreatin, kreatinin, etc. Whether these directly or other combinations, designated leucomaines, are really the poisonous agents, is not yet known. The presence of these poisonous substances in the blood in large quantities, makes many disturbances in the gravida, such as nausea, headache, neuralgia, etc. They have a deleterious effect on the liver and kidneys, like the toxins of diphtheria, scarlatina, etc., thus increasing in turn the retention of toxins or preventing the formation of anti-toxins.

Eclampsia is therefore an autointoxication during the progress of propagation; during pregnancy the metabolism of nitrogenous substances is not freely going on; signs of this is the appearance of kreatin, kreatinin, and leucomaines in the blood. If we look upon eclampsia in this light, the clinical appearance certainly fits exceedingly well to the theory, since the convulsions appear to be manifestations of cerebral irritation produced by some toxic agent. Aside from the seizures, the most striking feature of eclampsia in all those cases that came under my observation, has been the scarcity of urine, amounting in a few cases almost to anuria. Albumen and casts were always found in my cases, the former occasionally in such quantities that upon boiling in a test tube, the whole urine became one solid mass. From this observation, and from consid-

ering eclampsia an intoxication of the organism, we are able to take important hints for treatment of the attacks as well as for their prevention. The urine of the gravida furnishes us with the means to know a good deal about the metabolism of the tissue in the bodies of gravid women. For purposes of every day practice it is not necessary to scrutinize carefully the urine for certain chemical bodies, such as kreatin and their amount. I am of the opinion that even the amount of urea secreted is not of such importance to know. Some American writers have advocated a close watch on this chemical body in gravid women. In my estimation, it is the amount of urine secreted which is of the greatest importance. Albumen certainly plays no role in the production of eclampsia; as stated before, gravid and parturient women without albuminuria and without lesions of the kidneys, have been seized with the typical convulsions. I have found in a number of gravidæ transient albuminuria, that means to say, at repeated examinations of the urine of the same person, albumen was once or twice found, when it disappeared without any treatment whatsoever. Furthermore, women with a great deal of albumen in their urine have escaped eclampsia, if the secretion of urine was going on freely. I reported last year in the "Archives of Pediatrics," a case of albuminuria of pregnancy where the new-born baby had convulsions but the mother had none, and the notable feature in this particular case, was the very free flow of urine. It is an established fact that women with chronic nephritis are not taken with convulsions, at least eclampsia in such parturients is a great rarity. All this surely entitles us to say: albumen or no albumen in the urine, it does not matter whether there is or not; a woman will not be seized with eclampsia if her urine

flows freely. Certainly the constant presence of albumen and casts in the urine, and the appearance of edematous swelling of the limbs, is an indication that the kidneys are damaged; such kidneys may at the critical time, cease to work much easier than healthy ones. But the simple fact that a gravida has albuminuria, does not mean that she will have eclampsia, just as little as it is certain that a woman who has no albuminuria is safe from convulsions.

It becomes therefore necessary to see that the urine be secreted freely during pregnancy; especially toward the end of the term a careful watch should be kept, every change noted, and such steps undertaken as will produce a free secretion of the kidneys. It is but natural from what has been said before, that pregnant women with albuminuria, etc., need doubly careful watching. In cases of unsuccessful attempts at producing free urination, and in cases of tedious labor, other means must be employed besides, which tend to relieve the body of noxious agents through the skin and bowels. As I have stated before, I have nothing new to offer, but from my own personal experience, it seems to me that something can be done for the prevention of eclampsia in many cases; that the amount of urine secreted is the measure by which we are to be guided; that we keep in mind the toxic origin of eclampsia; that this watch be kept up, especially toward the end of pregnancy and during labor, no matter whether albuminuria is present or not.

AN ADDRESS

By W. W. CROSS, M. D., Visalia.

*Delivered before San Joaquin Valley Medical Society
Oct. 9, 1903.*

GENTLEMEN:—I hope you all know that it gave me a great deal of satisfaction and pleasure to be selected from

among your membership to preside as your President, and I wish to thank the members for the favor thus bestowed.

The San Joaquin Valley Medical Society, as you all know, was organized in Fresno, March 23, 1896, with a membership of 37, through the efforts of Drs. Felton and Sherman.

The characteristic of the membership has been harmony and good feeling. Since its organization there has never been any unpleasant feeling between its members, and the work laid out at the several meetings has been carried out almost to the letter. The election of officers has always been a portion of the regular order of business, and at no time has there been a campaign led by a member seeking an office; so that the evils resulting from such campaigns have been avoided. Everything has gone so harmoniously that there seems no place to offer suggestions in any of the methods employed by the society. One thing worthy of special attention is the great amount of kindness the younger members of the profession receive at the hands of their elders. I have never seen in an organized body so much kindness and consideration shown the young man. You have encouraged the writing of papers and participation in the discussions. These acts of kindness may seem of little consequence to those who bestow them; but to the receiver they mean much. As the young man enters his practice he has to face the fact that he appears young, and in many things he is not experienced. He is made to feel by the old women, who hold consultations at the bedside of his patient in his absence, that he is going to have the case taken from him on account of his lack of experience. Older members of the profession in competition shrug their shoulders and say "The boy should have known better, but he will learn," and he finds it uphill

work for a few years to hold a bad case and much harder to get hold of cases he is often well qualified to handle. Then again he often treats a brother practitioner in an improper manner because he knows no better, and if not treated with compassion by the older brother he is made to appear in a very unfavorable light, though he means well. When under these circumstances he has fallen in the hands of a true, honorable practitioner, who by his experience will show him the right way to turn and treat him with compassion instead of contempt, a foundation is often laid to make an upright ethical practitioner; but if mistreated or treated with contempt, it often starts him to look out for himself and in a few years he has a reputation not to be envied among those with whom he is thrown. The man, who has been in practice a number of years on returning to his case in the evening, if he finds Doctor B's prescription by his patient, at the same time knowing Doctor B to be a honorable man, knows that the family are more often to blame than the doctor, and a call from Doctor B or upon him, often finds that the lie is from the patient. I was once called back to see a patient whom I had seen in consultation, and upon arriving at the house asked for the physician in charge. I was informed that he had left the case; and said he could do nothing more for the case; that he would call as a friend but no longer as a physician. The doctor being an intimate friend of mine, and because of the very dangerous condition in which I found the patient, I concluded that he would not leave so sick a patient to his own resources; so I drove at once to see him. He said he was still in charge of the case, but upon learning of my presence would not make his usual visit. Had this gentleman not been an intimate friend of mine, I might have

returned home making a lifelong enemy and given him the impression that I was dishonorable in my conduct toward my brother practitioners though not to blame myself. All men meet the opposition of those engaged in the same business as themselves, when in the same locality. We know we are misrepresented and called ignorant upon matters we can ably handle, and when we meet with those who give us our just dues, we appreciate it more than we can describe.

The San Joaquin Valley Medical Society now has a membership of 62, after 4 years of existence. You have selected one of your youngest members to represent you as your President. After looking over all of his shortcomings you give him the highest position in your power. You all know that the approval by men in your own work means approval of the highest kind, for they judge you fairly. It has been my experience to find this society always full of compassion for an impetuous member, considerate of every one's feelings and giving words of encouragement to all, speaking of the things to commend themselves in the work brought before you and overlooking the shortcomings in the same. Who would not take pleasure in presiding over a society of this kind? For this distinction I thank you one and all.

THE PLAGUE IN SAN FRANCISCO.

CASES 16, 17 AND 18.

By W. H. KELLOGG, M. D., Bacteriologist of the Board of Health.

To the Honorable, the Board of Health, City and County of San Francisco:

GENTLEMEN:—I beg leave to present the following report on the plague situation at the present time.

From August 15th, the date of death

of Ham Tan, the fifteenth recognized case, no cases were discovered until October 6th, making an interval of 51 days apparently without the existence of any cases of the disease. This only confirms previous statements that an unknown center or centers of infection exist somewhere within the quarter from which, when the contribution conditions are favorable, new cases develop. It is significant that the latest series of cases commenced not long after the first rain of the season, which caused the Chinese to congregate in their ill ventilated dwellings. The approach of the rainy season is to be regarded with dread for the history of the plague in tropical and semi-tropical countries shows an increase during this season and a subsidence of the epidemic during the dry summer. Another element of danger to the community is the rapid increase of the oriental population at this time of the year, caused by the arrival of recruits from the orchards of the interior and from the fisheries and canneries in the north. Those from the salmon fisheries are, it is said, in especially poor condition to resist disease, being half starved and sick on arrival.

CASE 16. Lea Do Hen, aged 50, male, mongolian; occupation, cigarmaker; had lived in California 28 years; residence 710½ Dupont Street between Commercial and Sacramento. Died October 5th at 10 p. m. Examination of the body revealed a large bubo in the right inguino-femoral region. Incision disclosed a lymph node about the size of an egg, the surrounding tissues were filled with a chocolate colored fluid. The cut surface of the gland was very dark, purple and mottled, substance fairly firm. A microscopical examination showed numerous bipolar staining bacilli, decolorizing by Gram's method. Two guinea pigs were inoculated with a glandular emulsion on October 7th.

Autopsy record. The pig lived four and one-half days after inoculation. Large area of coagulation necrosis, about 1 x 2 inches surrounding point of inoculation on anterior abdominal wall. Wide spread edema and hemorrhages in the subcutaneum. Lymph nodes enormously enlarged in both groins, the mass on each side being about the size of a lima bean. Both lungs studded with yellowish white nodules. Each pleural cavity contained about 2cc. of pinkish mucilaginous fluid. Liver greatly enlarged, congested and mottled. Spleen about fifteen times normal size, dark and friable and covered with yellowish specks. Vessels of the mesentery injected. A small amount of thick pinkish fluid in the peritoneum. Supra-renal capsules and pelves of both kidneys hemorrhagic. The organ of the animal contained the plague bacillus in myriads and it has been obtained in pure culture from them.

CASE 17. Chun Yen, male, aged 37, mongolian, laborer; had been in California 10 years; residence, 767 Clay Street between Kearny and Dupont. Died October 10th at 2 a. m. According to the statement of a white physician who lives and practices among the Chinese, he had been sick two weeks and died of typhoid pneumonia. The body was that of a very large, fat and well nourished man, who would probably weigh 200 pounds. An enlargement of the glands of the left femoral region could be detected through the thick layer of fat. These were removed and found to be about the size of hazel nuts, very dark and necrosed. Smears showed the typical bipolar bacilli in large numbers. Two guinea pigs were inoculated on October 11th with an emulsion of the glandular tissue and both lived about three and one-half days.

Autopsy, guinea pig No. 1. Large area of coagulation necrosis about 1½

inches in diameter surrounding the point of inoculation. Marked subcutaneous edema. Enlargement of the lymph nodes and hemorrhages in the left groin and axilla; lungs normal; spleen about three times normal size, very dark and soft, but no yellow spots; punctiform hemorrhages in peritoneum covering small intestines.

Guinea pig No. 2. Large area of coagulation necrosis about one inch in diameter, surrounded by a zone of edema and subcutaneous hemorrhage. A marked hemorrhage in the left groin, but no enlargement of the glands; lungs normal; spleen about three times normal size and shows a few yellow spots; same condition of peritoneum as in first pig. The plague bacillus was recovered in pure culture from both pigs.

CASE 18. Tai Dong Leong, male, aged 39 years, mongolian; had lived 25 years in California; residence 905 Clay Street between Stockton and Powell. Died October 14th at 11 p. m. The diagnosis in this case was established by a clinical examination of the blood during the life of the patient, who was attended by Dr. J. Coplin Stinson, who reported the case to the Department as suspicious as soon as he had seen it. On October 14th the patient was seen by a number of physicians among whom were Drs. Ryfkogel and Kinyoun and blood was secured for examination as well as some fluid aspirated from the bubo. These samples both showed the specific bacillus in large numbers and I have secured it in pure culture from both sources. Two guinea pigs were inoculated, one with the pure culture grown from the blood and the other with spleen obtained at the autopsy. A guinea pig inoculated with a pure culture from the blood, died of a typical plague infection, including the well-known brown hemorrhagic and subcutaneous edema. No enlargement of the lymph nodes, the organisms were

present in the spleen and blood in larger numbers than usual. It is worthy of note that Chun Yen contracted the disease in the same house as the thirteenth case, Lee Wing Tong. This house was quarantined and thoroughly fumigated in the interval between the two cases.

It is greatly to be regretted that circumstances necessitate the quarantining of contacts in the house where the case occurred, thus subjecting them to further danger of contracting the disease, but until a detention hospital is supplied by the municipality nothing else can be done.

APPENDICITIS, A SURGICAL DISEASE.

By J. D. DAVIDSON, M. D., Fresno.

Read before San Joaquin County Medical Society, October 9, 1900.

At a previous meeting of this society, I was called upon to open the discussion of a paper entitled, "Appendicitis, a Medical Disease." At that time, I took the stand that while I thought that appendicitis was a surgical disease, I also thought that there were cases which might come under the head of medical treatment. I now, from a more extended experience, declare it to be a surgical disease pure and simple, as much so as I would senile gangrene of the foot. If you will consider the anatomy of the organ and look at it from a common sense view, I think you will see that the administration of medicine would be as useless as if it were given for a nail in the foot. You understand that the appendix is the rudiment of the lengthened cecum of all the mammalia except one or two, and in man has no function; it is connected to the cecum at its lower and back part and its orifice is guarded by a fold of mucous membrane forming a valve; its internal coat is synonymous to that of the cecum; it is a useless organ, and, if causing any trouble should be removed the same as you would a super-

fluous digit. Being a closed sack at one end and guarded at the minute opening by a valve at the other, makes it very prone to disease from germs, bacteria, fecal matter, etc., getting within its cavity, causing poisonous gaseous formation, inflammation and swelling, completely closing the opening into the cecum and then the bacillus coli communis gets in its deadly work,—frequently causing an acute infectious wound.

Now, when you have a condition of this kind, will anyone say that giving medicine per mouth will reach and have any influence on this closed cavity; for the only possible way of reaching the diseased condition is by absorption through the capillary system and then by way of the blood. We all know that after any medicine has reached the circulation, it is so changed by chemical action that it takes an expert to determine what it is. I know that the members of the profession, who take a different view from me in regard to appendicitis, will ask the question, "Why do so many cases have repeated attacks of the disease, and still yield to treatment; and do we not have a recurrent catarrhal appendicitis wherein there is very little disturbance to the system, and the patient is only confined to his bed a day or so?" To this I will answer, yes, and this is one of the conditions in which I claim we have no right to endanger our patient's life by allowing it to recur. In this condition, we usually have a stricture of the appendix on its inner side and its outer wall becomes hard and feels like a cord; its inner cavity beyond the stricture is usually pouchlike and if you will remove it, you will find it contains the detritus from a former inflammation, and is the greatest hot-bed for bacteria that one could imagine, and sooner or later the infectious germs will reach it. Then you have an acute infectious appendicitis, which in from 20 to 60 hours

will become gangrenous, necessitating a dangerous operation and frequently causing death. With these facts before you, will any one of you still contend that you think these are cases that can be cured by medicine? Furthermore will any of you contend that you can tell just what course a case of appendicitis will take, even though you have treated the patient through a number of attacks before. Conservative treatment of a case of appendicitis lays your patient liable to death, and you to self reproach. How many of you here have had your cases die from general peritonitis after one week's medical treatment; which, if they had been operated on during the first 24 hours, the mortality would have been less than 2 per cent. I can recall several in my own practice, I am sorry to say, and no doubt my experience is not different from that of others. When we stop to think that in the acute infectious variety the death rate in the first 24 hours is less than 2 per cent after operation, increases to 20 per cent in the next 24 hours, and from 50 to 75 per cent after the third day,—can anyone then be justified in calling a case one suitable for medical treatment. I claim that no one can distinguish a catarrhal from an acute infectious case in the first 36 hours, when the mortality rate increases in such proportions as it does. If the organ was of any use whatever, or the operation was attended with any grave danger, we would have a right to stop and weigh our actions well before proceeding, but with the small danger attending it, we are not justified in subjecting our patient to the grave danger of waiting from morning till evening and from evening till morning to see whether it is a simple appendical colic, or of the graver kind. In my experience and that of others whose operations I have witnessed, I have never seen a fatal case operated on in the intermittent stages of catarrhal, or

during the first 48 hours, of the acute infectious varieties, but I have seen them die from the so-called conservative methods and from operations as a last resort, and I can assure you that every case of mine that has died has been one of reproach, for I was negligent of my duty, or I would have insisted on an operation when there were hopes of the patient's life.

The object of this paper was not to diagnose appendicitis, which we very frequently overlook until a late date, nor to show any technic of operation, but to try to demonstrate to the members of the profession that appendicitis is a surgical disease, and, if I convert one member to my views, I feel that it will be the means of saving a few lives that would otherwise be lost.

ETIOLOGY OF PNEUMONIA.

By CHAS. A. DUKES, M. D., Oakland, Cal.

Read before the Alameda County Medical Society May 10, 1900.

Pye Smith in his article in Allbutt's System of Medicine says: "Of the causes of pneumonia we are still ignorant unless we disbelieve careful observations because they do not fit a hypothesis, pneumonia can exist without the pneumococcus; and the same microbe may be found not only in disease without pneumonia, but under healthy conditions also whether under certain circumstances this usually innocent microbe acquires virulence or whether a noxious and harmless parasite resemble each other too closely to be distinguished we cannot say; nor can we define the exact conditions which favor the occurrence of the disease. It is certain, however, that pneumonia is connected with cold, with north winds, with high grounds and with sudden fall of temperature." Of one point we are certain that for the production of lobar pneumonia there must be a cause of inflammation, such as ex-

posure to cold and the growth of pathogenic bacteria. The old conception of pneumonia was that it was simply an inflammation of the lung. Within a few years the opinion that, on the contrary, it is a general disease of which the inflammation of the lung is the characteristic lesion, has gained very general acceptance. With our present knowledge it seems most probable that pneumonia belongs to the class of infectious inflammations, that is, it is an inflammation of the lung accompanied by the growth of pathogenic bacteria. The growth of these bacteria is attended with the formation of poisonous chemical products, and, according to the quantity and virulence of these products the symptoms of general poisoning are more or less marked. The organism most frequently found is that described by Frankel. Authors disagree as to its frequency. Some say it is found in 90 per cent. of all cases and others only find it in 75 per cent. or less. This same micro-organism is also found with pleurisy, pericarditis and peritonitis. It is not, as has been said by some, the cause of cerebro-spinal fever, the diplococcus intracellularis being their specific agent. A recent article concludes that the bacillus of Friedlander, which is found in about 25 per cent. of all cases of pneumonia, should be regarded more in the light of an accidental contamination. Suitable conditions must prevail before the pneumococcus can excite pneumonia, in other words, there must be a depressed systematic condition. It is a resident in nearly all normal lungs and only requires a lowered resistance in the parts to set up a pneumonia. While ubiquitous in the body, it is especially active when brought in contact with serous surfaces. As recent investigators have been prone to lay more stress and put more time along the line of germ

theories it might be well that we should lay more stress on etiological factors with which we come in daily contact. As to the conditions that lead to a lowered resistance the various authors give many headings.

EPIDEMIC INFLUENCES. — Excluding bronchitis and ophthalmia, in which cold seems to act as a direct irritant, pneumonia affords the best evidence that there is truth in the common belief. "That a chill may strike inward, and lends probability to the view that other acute inflammations as pleurisy, cellulitis, acute Bright's disease and even myelitis may sometimes be due to a similar cause.

SEASONS.—It is more prevalent in the spring the period of maximum frequency in most temperate climates being from February to May. Of 5,905 cases collected by Seity of Munich 36.8 per cent. occurred in the spring, 32 per cent. in winter, 15.7 per cent. in autumn, 15.3 per cent. in summer.

SEX.—The male is more frequently attacked than the female. Some medical men, with whom I have talked, seem to think that this is due not so much to their more exposed work and habits, as to alcoholic influences. This will hardly explain the fact that more male than female children are attacked.

UNHYGIENIC SURROUNDINGS.—I do not believe that it is the bad odors or filth that influences the onset of the disease, but the irritating dusts. In the coal mines we have the "coal miner's lung;" in the lumber mill districts the redwood saw-dust is said to be very irritating and to have caused pneumonia. Ranchers harrowing dry fields, and in threshing grain and in handling hay are in the same way exposed.

EPIDEMIC INFLUENCES.—Pneumonia may occur in epidemics; though its con-

tagiousness must for the present at least remain unsettled. Prisons, barracks, asylums and certain districts have seemingly become involved in epidemics, while those living in the country and leading an out of door life seem to be less liable to the disease than those living in crowded cities. From time to time we see several persons in the same building successively attacked, but it is rare for the relatives, nurse, or physician attending a pneumonia case to be attacked.

TRAUMATISM.—Pneumonia follows gun-shot wounds and other traumatic injuries to the chest though the number of cases is small.

PREVIOUS MORBID CONDITIONS.—One of the most important previous morbid conditions is influenza. Pneumonia following this disease forms an important link between idiopathic pneumonia and the secondary pneumonia of fevers and septicemia. Recent statistics give from 2 per cent. to 4 per cent. of influenza cases as complicated with or followed by pneumonia with a mortality of 20 per cent. to 29 per cent. Measles scarlatina and typhoid fever are not unfrequently followed by pneumonia. It seems to occur most frequently in typhus fever and less frequently in enteric fever. Pye Smith says it is important to note that lobar pneumonia is very rare as the consequence of phthisis or bronchitis, whether acute or chronic, heredity, constitutional characteristics, daily habits, occupation and climatic conditions all influence the preparation of the lung for the development of pneumonia. I believe this preparation has vastly more to do with the pneumonic condition than has the dissemination of the pneumococcus. The frequency with which we meet a pneumonic process as the result of an extension of an inflammatory process beginning in other organs tends to prove this.

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THE PLAGUE AND THE PACIFIC MEDICAL JOURNAL.

It has always been the aim and endeavor of THE MEDICAL TIMES to avoid personalities and therefore personal criticism, which could be construed as such. This rule would remain inviolate in the present case were the matter one of mere personal concern, but the question is of far greater magnitude and of such far reaching consequences that we have no alternative but to reopen it. We would have avoided this course, despite our contemporary's scurrilous abuse of this journal and its persistent and mendacious calumny of many reputable physicians, had not the occurrence of five fresh cases of plague, on the 5th, 10th, 14th of October and November 2d* rendered it imperative to again point out the great danger that threatens our city and its manifold interests. In discussing this matter with the *Pacific Medical Journal* it will be impossible to separate therefrom the personality of its responsible editor and proprietor, Dr. Winslow Anderson, as that gentleman has made himself mainly responsible for the present situation.

The situation in brief is this: The Governor of the State of California urged by the business and monied interests of San Francisco and also by the politicians, upon whom similar pressure had been brought to bear, has undertaken, with the assistance of the State Board of Health, to suppress every fact in connection with the existence of plague in San Francisco. This then is no longer a mu-

nicipal or a State question. It is a national and an international question. It is a crime against civilization. It is an outrageous piece of selfishness on the part of our metropolis, in which the interests of the State and of the Nation are wholly disregarded.

We had hoped that our issue of July was sufficient to convince any rational being that bubonic plague existed in our midst. In support of this view we refer our readers, amongst other communications, to editorials in the following journals: *Journal American Medical Association*, *Philadelphia Medical Journal*, *Colorado Medical Journal*, *Modern Medical Science*, *Medicine*, *The Sanitarian*, *Cleveland Medical Journal*, *British Medical Journal*. These journals had access to both sides of the controversy and formed their judgments accordingly. The *Cleveland Medical Journal* (September, 1900,) says:

In its first editorial of the August number, the *Pacific Medical Journal* characterises the various health-officials of the City, State and Marine Hospital Service as "those who have so earnestly labored to establish San Francisco as a plague-ridden city." It asserts that no plague-infection could reach San Francisco if the health inspectors did their duty. It accuses the health-authorities of dishonor, saying: "there has always been more effort to keep the plague here, than to keep it out." It asserts that no ship landing in San Francisco* was positively proved to be infected with plague. It says: "No diagnosis of plague was made, excepting by those who were hunting for plague and were compelled to find it to bolster up their quivering reputations and their unreasonable positions." This, as applied to one of the most eminent bacteriologists and pathologists in the United States, perforce compels a smile at the zeal of this editorial writer, who so early laid aside

* November 2d two cases were found at 802 Dupont Street—mother and child. Mother had enlarged bubo, child pneumonic form. Bacilli found in nasal secretions.

his discretion and his *esprit de corps*. "No disinterested party could swear whence came these specimens." "These tests were never verified so as to be free from suspicion." "All kinds of questionable practices, chicanery and possibly criminality, were resorted to in order to bolster up an untenable position." "Not a single case has been seen that bore even a resemblance to bubonic plague." Then the pathologists are called "incompetents that have claimed to have found the germ of bubonic plague," and the reader is assured that the bacteriologists have "brought the medical profession to the low plane of political intrigue and put them before the public as schemers for prestige and plotters for gain." *Sic!* Is not this almost beyond belief? This remarkable editorial closes with the following extraordinary paragraph: "In contrast to this miserable faking we call attention to the honest, noble, unselfish, courageous and effective course pursued by Governor Gage, *the people's friend and the low schemer's dreadful foe*" ! ! !

Our issues of April, June, July and August have completely covered the question to the 1st of October. Our criticism therefore will be confined to the editorial in the *Pacific Medical Journal* for this month. The reference to Dr. Kellogg's report and the interpretation placed upon certain sentences is misleading and false. His diagnosis has been questioned, but it could not be stated more plainly and more positively nor could it be verified more thoroughly or scientifically. It was concurred in by Dr. Kinyoun and Professors A. E. Taylor and Ryfkogel of the University of California; and when our contemporary says that it knows that guinea pigs inoculated by Dr. Kellogg with pure cultures, taken from the glands and spleen, lived, it is stating that which is absolutely untrue. In this same connection it objects to our use of the word "ominous" and our statement that the disease "has not abated." We made that assertion because it is in keeping with the history of all epidemics, a fact of which

our contemporary is contemptuously or intentionally ignorant. The occurrence of five more cases has proven the correctness of our statement.

The reference to the epidemic at Glasgow is poorly taken. Our contemporary must know that a majority of the cases in that epidemic have been of the pneumonic form, which as we have insisted is highly contagious and deadly. All the San Francisco cases have been of the bubonic variety. Moreover it should know that the last few cases in the Glasgow epidemic have been of the bubonic variety; that the number has correspondingly decreased; that they have occurred at longer intervals and the source of contagion is more difficult to trace. The history of the initial outbreak of that epidemic is remarkably similar to the case of the lamented Dr. Muller. Our contemporary should also remember that, even with the pneumonic form at work, only 29 cases have died.

It would not be possible to furnish a more caustic comment upon our contemporary's argument than the following, which is taken from an article on "The Bubonic Plague from a Sanitary Standpoint," by Chas. F. Craig, M. D., Acting Assistant Surgeon U. S. A. and Pathologist and Bacteriologist to the U. S. General Hospital, Presidio, San Francisco, (*Pacific Medical Journal*, August, 1900). With strange inconsistency this article has been permitted to appear in the very issue, wherein our contemporary in unmeasured language, has emptied the vials of its wrath upon us for supporting "those who have so earnestly labored to establish San Francisco as a plague ridden city." Dr. Craig says:

It may be said here that communities are always slow to admit the presence of any epidemic disease, and this is most apt to be the case with plague. Time and again the authorities of infected cities have been crim-

inally dilatory in admitting the presence of the plague, and hundreds of lives have been sacrificed to their criminal ignorance of the disease. The following statistics prove that plague epidemics are slow in development: "In Hubli, as quoted by Montenegro, only eight cases occurred during three months. In the great epidemic in London in 1665, the first case occurred on December 20th of the previous year, the second on February 9th, and the third and fourth on April 22d (that is, only four cases in five months), but the mortality of the London epidemic, though it began so quietly, was one of the most awful known to history." In the recent epidemic in Rosario, South America, only four cases occurred in three months. In the epidemic now raging in Sydney, Australia, only thirteen cases occurred in the first sixty days. In Honolulu, it is said on good authority, that sporadic cases of plague occurred weeks before the disease was formally recognized as being present. In Osaka, Japan, where plague is now epidemic, only three cases occurred during the first six weeks. Thus it will be seen that the above, which is but a small portion of the evidence which might be adduced, prove the fact that plague is insidious in its attack and slow in development. In San Francisco eleven well authenticated cases of plague occurred within ten weeks and the smallness of the number has been used as an argument against the disease being plague, whereas, it is in reality one of the strongest arguments in its favor, for this small number is absolutely typical of the outbreak of all plague epidemics. The first few cases having remained unrecognized, and the epidemic thus having become established, the active period commences, and hundreds are attacked within a comparatively short time. This fact has been well illustrated in Bombay and Hong Kong. The subsidence of a plague epidemic is generally slow, almost as slow as its development, and often an apparent disappearance of the disease is followed by a fresh outbreak, and thus it may persist for months, causing infinite apprehension and anxiety to the unfortunate inhabitants of a stricken locality.

The closing sentences of this most incredible editorial demand the serious attention of the whole profession:

Will any just, logical, unprejudiced individual make the assertion or entertain the

conviction that San Francisco has ever had within its limits a case of bubonic plague? Let any honest individual weigh the facts as they are here today and have been and if he comes to any other conclusion than that it was impossible under the circumstances for San Francisco to have had a case of plague we believe him to be incapable of logical reasoning and a fit subject for public care. As for the dishonest individuals the State has no law that would do them justice.

Men of integrity are thus recklessly condemned as guilty of a criminality, so great that the State has no law that could do them justice. Our contemporary invites a weighing "of facts as they are here today and have been." Briefly they are as follows: There have been identified and demonstrated 21 cases of bubonic plague in San Francisco, all of which have proven fatal. The first was found on the 6th of March, 1900, and the last on the 2d of November. With this issue all these cases have been reported in full in *THE MEDICAL TIMES*.

The cause of death in each case has been verified by every postulate laid down by KOCH, KITASATO, YERSIN, ROUX and CALMETT of the German Plague Commission and by at least a half dozen local and visiting physicians working independently. The diagnosis in the earlier cases has been confirmed or concurred in by the very highest authorities in America, in proof of which we offer the following: Editorials of the journals previously referred to; the testimony and results of the investigations of DR. J. J. KINYOUN, whose findings "are at least worth the collective wisdom of all the local practitioners in San Francisco or any other city;" of the Marine Hospital Service as voiced by DRs. ROSENAU, GEDDINGS, KERR, LUMSDEN, GASSAWAY and AGNES WALKER; of the Board of Health of San Francisco and its "incompetent" pathologist DR. KELLOGG; of PROFESSORS MONTGOM-

ERY, KERR, RYFKOGEL and TAYLOR of the University of California; of PROFESSOR OPHULS of Cooper Medical College; of DRs. DAY, RAYMOND, COOPER and HOFFMANN of Honolulu; of DR. CHAS. I. FAGAN, Secretary of the Provincial Board of Health of British Columbia; of DR. G. F. SHRADY, Editor of the *Medical Record* of New York; of DR. HILL in the name of both Johns Hopkins Hospital and of the Massachusetts Board of Health; of DRs. BLUNT and NORTON of the Texas Board of Health; of the Colorado Board of Health; and finally of the California State Board of Health (of June, 1900), and of DR. E. S. PILLSBURY, Professor of Pathology and Bacteriology, College of Physicians and Surgeons of San Francisco and one time special pathologist to the State Board of Health of California, employed by the Governor, presumably with the concurrence of the editor of the *Pacific Medical Journal*. These are the "dishonest" individuals to whom our contemporary refers as "incapable of logical reasoning" and "fit subjects for public care." What influence could lead any sane individual or even the editor of the *Pacific Medical Journal* to deny the existence of any thing in the face of such evidence! The answer is plain—preferment and politics.

As a side light upon this aspect of the case we find the following on page 604 of our contemporary's issue of August last:

In contrast to this miserable faking we call attention to the noble, honest, unselfish, courageous and effective course pursued by Governor Gage, the people's friend, and the low schemer's dreadful foe. Were he made of such stuff as that which controls San Francisco, our City and State would now be shut out from the rest of the world, our port closed, our people begging for food, and the bubonic supporters hovering over us like so many vultures. He has been a friend in need,

and the people of California will not soon forget his services.

On page 610 of the same issue this also occurs:

DR. WINSLOW ANDERSON, editor and proprietor of this journal, has been the recipient of the distinguished honor from Governor Gage of being appointed Surgeon-General of the State of California, to serve on the Governor's staff, with the rank of Colonel.

Our contemporary lays great stress upon the absence of a "clinical diagnosis," in the majority of the cases reported, as fatal to their classification as plague. It is a fact that of the 18 recorded cases all but 4 were found dead and it will, no doubt, be conceded that in these a clinical diagnosis was impossible.* Apparently our contemporary, notwithstanding its "confession of faith" "we believe in the germ theory of disease" (*Pacific Medical Journal*, August, p. 604), would absolutely ignore the evidence to be obtained at the autopsy or by subsequent bacteriological examination. If such evidence be inadmissible as untrustworthy the whole theory of the value of *post-mortem* examinations in connection with coroner's inquests falls to the ground. Now upon evidence obtained at *post-mortem* examinations and furnished, for the most part, by every day general practitioners much of our criminal procedure is based and many a man has been hung upon this evidence alone. It will be conceded that this is not often the evidence of experts yet throughout English speaking countries it is regarded as ample basis for the taking of human life judicially, while here in San Francisco, at the very close of the nineteenth century, the overwhelming evidence of admitted experts is not considered a sufficient basis for the saving of human life by the adoption of necessary sanitary precautions. So much for clinical diagnosis. The pos-

*Cases of November 2d not yet reported.

sibility of personal contact with infected premises and certainly the direct connection between some of the cases would seem to be settled by the fact that the case of Murphy and that of Ham Tan on July 6th and on October 10th respectively occurred in the same house, 767 Clay Street, while that of Lea Do Hen of October 5th and of a Chinese girl, over whose burial there was some financial difficulty, and whose case was not reported, came from a cigar factory on Battery Street.

Our contemporary is unwise in clamoring for a clinical diagnosis and mistaken in asserting that no connection has been traced between any of the cases or that any personal contact could be implied or proved. Cases 8, 13, 14, 18, were seen during life and the diagnosis of plague made before death by Drs. KELLOGG, KINYOUN, MOFFITT, WILSON, STINSON and others.

As the question of honesty is a prominent issue with the *Pacific Medical Journal*, it is only fair to ask upon what grounds it has been stated that "no disinterested party could swear whence came these specimens;" "that tests were never verified;" "that all kinds of questionable practices, chicanery, and possibly criminality were resorted to;" "that no single case has been seen that bore even a resemblance to bubonic plague, etc.;" and why it was further remarked that: "You are honest in your belief that plague has been here, but we believe that you have been imposed upon. In other words, fake specimens purporting to have come from bodies dead with the plague had been given you for examination!" Upon what grounds has Dr. Kinyoun been charged with having been bought by the San Francisco Board of Health to say that plague existed? Upon what grounds

does the *Pacific Medical Journal* state that Dr. RYFKOGEL denies that from cases 14 and 15 "he was unable to procure the bacillus pestis and that pure cultures from these bodies were not pathogenic to guinea pigs." We fear that the distinguished Editor of our contemporary is not honest in assuming to be an authority upon plague on the basis of a brief study of the disease in Calcutta in 1892; for according to figures that are available in the Government reports plague did not appear in Calcutta until February, 1897, when one case was reported and was not officially declared by the Medical Officer of Health to exist until April, 1898. From the collective evidence one is apt to conclude that the motive behind all this is none other than to make use of an occasion, so fateful in consequences to our State, "as a stepping stone" for preferment. If this is not a correct belief it is a truly remarkable coincidence that preferment should have followed so soon after the appointment as a member of the Board of Health. We do not deny the right of the use of his position to further either his personal interests or that of the medical school of which he is the head, but it does appear strange, remarkably strange, that when called on by the Governor to furnish him with information regarding the true (?) situation that this medical school should furnish the experts, his "lieutenants," to the exclusion of absolutely independent sources. It is still more remarkable that the so-called independent investigation should have been made jointly with the Chinese Six Companies, to whose interest it was to deny everything regarding the plague. We heartily agree with him that it was a pity the Governor had not seen Dr. KINYOUN and had a talk with him in July, instead of depending upon "competent medi-

cal men of unimpeachable integrity and ability," as thus might have been avoided the complications that have since occurred. It is a still greater pity that the Editor of the *Pacific Medical Journal* did not adhere to his original opinion that he could not afford to go into the business for the "money that is in it."

Speaking of the question of "money" it will be noticed that all those, who testify to the existence of plague, have done so gratuitously or else have furnished the evidence in regular discharge of their duties, for which they were in receipt of salaries, payable no matter what conclusion had been reached. In some cases testimony is forth coming that may be said to have been paid for by the other side, for instance that of DR. SHRADY, and of DRs. RYFKOGEL and PILLSBURY (cases 14 and 15). On the other hand all the evidence in controversy is supplied by those, employed in the hope that they could furnish it, or by gentlemen in the service of the Chinese Six Companies. We do not mean for one instant to cast any reflection upon the right of these gentlemen to so employ themselves. In laying the case before the jury of the profession we must however regard them as expert witnesses, that would not have been retained by the defense had they held any other opinions.

In connection with the question of disinterestedness in this matter the following from the *Sacramento Bee* (October 7th, 1900), is not without point. Under the caption "Some of the Costs of Suppressing the Plague News" the *Bee* says:

Warrants have just been issued from the office of the State Controller on account of the contagious disease fund of the State Board of Health which gives an idea of what it has cost the State to suppress the news relative to

the cases of bubonic plague in San Francisco.

These warrants are all issued upon the approval and order of the Governor, who has personal charge of the State Board of Health's money. The most interesting warrant in the lot is that drawn in favor of Dr. S. M. Mouser, for \$355. Dr. Mouser is the bacteriologist who investigated the plague case of July 6th and said it was only some simple fever and whose report—together with that of Dr. Ryfkogel, the regular bacteriologist of the Board—the Secretary of the Board, by the order of Governor Gage, declines to make public. These are the reports on account of which *The Bee* secured a writ of mandate from Judge E. C. Hart, the matter now being before the Supreme Court on appeal. Dr. Mouser did not attend the autopsy, merely examining specimens submitted to him. For this he charges \$250 for his own services and \$50 each for two assistants, although he claims that the disease was only some simple fever. His bill is made out as follows:

For microscopic and bacteriological investigation, as per agreement.....	\$250
For two assistants, \$50 each, as per agreement	100
For carriage hire for General Sternberg to visit laboratory.....	5
	\$355

This bill is approved by Dr. Winslow Anderson, the San Francisco member of the State Board of Health, who was appointed after Dr. Bazet was removed for too much loquaciousness regarding plague cases, and in his approval, Dr. Anderson states that the amount is correct and as agreed upon. The item of \$5 for carriage hire for General Sternberg is a piece of news. General Sternberg is the Surgeon-General of the Army, who was in San Francisco some time after the case of plague referred to on an inspection tour of Army posts. It is presumed that Dr. Mouser got him to go to his laboratory to examine the slides prepared from the plague case and to have him, if possible, confirm his diagnosis. Apparently he did not confirm it, for if such had been the case there can be no question that the fact would have been shouted from the housetops and scare-headed in every newspaper in San Francisco. General Sternberg's examination cost the State \$5 for carriage hire while Dr. Mouser's examination cost the State \$350 and the public has been denied the benefit of either.

There are some bills for Inspectors which

are also interesting. When the plague cases were first discovered the State Board of Health—which had not then been re-formed by the Governor to conform to his ideas concerning plague and had issued two reports stating that plague actually existed in San Francisco—wanted to have a corps of Inspectors to supplement the work of Dr. J. J. Kin-youn, the Federal Quarantine Officer, who was conducting a rigid inspection of trains to prevent people who had been exposed from getting out of San Francisco. The Governor declined to allow this, for such an inspection would amount to a confession that plague existed, but he told the members of the State Board that they might appoint Inspectors for their various districts, to see if they could find cases of plague, and that he would approve claims, paying them for their time and paying their Inspectors at the rate of \$10 a day. This offer was accepted by most of the members of the Board, Dr. Ruggles, the Stockton member, doing the inspecting in his own district himself and making a request to be allowed to inspect the Sacramento district, which was then in charge of Dr. A. M. Henderson, another member of the Board who was removed in the course of the reconstruction process applied by the Governor.

Dr. Winslow Anderson, of San Francisco, was the one to principally take advantage of the Governor's offer. He appointed Dr. D. A. Hodghead, Dr. Henry D'Arcy Power and Dr. Ernest S. Pillsbury. The San Francisco Board of Health was then conducting a rigid inspection of Chinatown in San Francisco and two of the appointees of Dr. Anderson, Dr. Power and Dr. Pillsbury, were in the employ of the Six Companies, which was trying to counteract the reports of the existence of plague. It was Dr. Pillsbury who sent the case of July 6th to the City and County Hospital of San Francisco, diagnosed as typhoid fever, although the autopsy showed that there were no indications of that disease. In addition to what they were paid by the Six Companies for trying to prove there was no plague, Dr. Power was given \$350 for inspecting Chinatown in behalf of the State Board from June 27th to July 31st, and Dr. Pillsbury was paid \$50 for inspecting from August 14th to August 18th.

Dr. Hodghead had three claims paid, one for \$350 for inspecting from June 27th to July 31st, the time also covered by Dr. Power, another for \$70 for inspecting from August

13th to 19th, with \$2.40 additional for telegrams sent to Dr. Anderson, then in Los Angeles, relative to a suspected case, and a third claim of \$60 for inspecting from August 20th to August 25th.

Dr. Anderson was himself paid \$50 for "expenditures during my investigation of suspected plague in San Francisco, for carriages, laboratory work, assistants at autopsies, telephone messages, telegrams."

A short time ago Dr. Hodghead was paid \$120 for inspection in Chinatown from August 1st to August 12th and Dr. Power was paid \$190 for inspection in the same district from August 1st to August 19th. Dr. William M. Lawlor was also paid \$190 for inspecting Chinatown from May 31st to June 18th.

* * * * *

Some of the expense bills of members of the State Board are interesting, particularly that of Winslow Anderson. Anderson lives in San Francisco, but whenever he attends a meeting there a bill is presented, and paid, for \$2.50, itemized as "board" and \$1 for carriage hire. In one or two instances the "board" item amounts to \$3. Anderson also has items in for "carriage to Chinatown," and other items charges as "carriage for members to Mouser laboratory" and "carriage for members to Chinatown," his own carriage hire amounting to \$1 in each instance and that of the members to \$2.50 in each instance. There is an additional item of \$1 for "carriage for Ruggles," and an item of \$2 for "carriage for Mouser and microscopes."

In conclusion we have only to add that there is one thing in this world that cannot be permanently throttled or suppressed that is the truth. Error and misrepresentation may prevail for a time but "truth is eternal." Believing that we were right our duty seemed clear and we have endeavored to perform it. It is, perhaps, needless to say, we shall continue to do it. We sincerely trust that there will never be an epidemic of plague in California. Yet now should such occur or should the few and scattering cases increase or extend to the interior of the State then indeed we pity the false prophets of our misguided people, who heeding

the gathering storm of a repentant press and an aroused and incensed people will surely "flee from the wrath to come."

THE RECENT NEWSPAPER ATTACKS UPON DOCTOR KINYOUN.

The recent attacks of the *Chronicle*, *Call* and *Bulletin* on DOCTOR KINYOUN and the quarantine methods instituted by the National Government is another evidence of the extremes to which these organs will go in falsehood and misrepresentation. This attack was premeditated. It was arranged that it should appear at the time the Public Health Reports, containing his investigations of the San Francisco cases of plague, would be given to the public, which effort was frustrated however by the ill-advised letter of DR. E. S. PILLSBURY to SURGEON-GENERAL WYMAN, stating that he had confirmed by the Yersin test the diagnosis of plague in the cases of July 6th, and August 11th. No further opportunity for a concerted action on the part of these organs occurred until the Coptic arrived in port on September 30th, when their columns fairly burned with charges of brutality, ruffianism, indecency and abuse, both of passengers and their baggage.

The facts however are these: On September 23d DR. KINYOUN left San Francisco for Vancouver, B. C., on official business and returned on the 4th of October. The Coptic had been quarantine for 10 days at Kobe because of a death from plague on her east-bound passage after leaving Honolulu. The source of infection in all probability came from San Francisco as is attested by the following:

HONOLULU, H. I., September 25, 1900.

SIR:—Referring to Bureau telegram of September 11, 1900, relative to a case of plague found on the steamship Coptic on her

arrival at Kobe, Japan, in the person of a Chinaman from Honolulu, I have the honor to inform you that, so far as known, there has been no plague in the Hawaiian Islands since March 31 of this year. The Chinaman referred to was named Wong Chong Sow who resided at or near a place on the northeastern side of the island of Oahu called Kahaluu. He was a rice planter, had lived at the place indicated for about four years, and was not in Honolulu during the existence of the plague. Kahaluu is distant from Honolulu about 15 miles. Wong Chong Sow came to Honolulu on the day the Coptic sailed hence August 2 and took only his baggage from where he lived at Kahaluu and nothing from Honolulu. He was in good health when he left here and was taken ill after the Coptic left Yokohama, Japan, about August 12 or 13.

There is no suspicious sickness at Kahaluu of any kind, and the presumption is that if Wong Chong Sow died from plague he was infected on the Coptic, possibly from diseased rats, as 3 of those animals were found dead in No. 4 compartment where the Chinaman was taken ill, and their bodies contained plague bacilli. The Coptic was fumigated with SO₂ at Hong Kong, and after the fumigation 46 dead rats were found in the hold of the vessel.

I have received through the courtesy of Dr. Moloney, surgeon of the Coptic, a slide prepared by the Japanese authorities from the blood of a mouse inoculated from the glands removed from the body of Wong Chong Sow, which shows typical plague bacilli. I did not allow the Coptic on her return trip to San Francisco to dock at Honolulu, and her freight for this place was disinfected. She had no suspicious sickness on board.

It is possible that infected rats may have been in the vessel when she left San Francisco on the outward voyage to the Orient, and if so we may be in danger here, as the vessel docked at Honolulu on the outward run.

Respectfully,

D. A. CARMICHAEL,
Surgeon, U. S. M. H. S. and Surgeon-General, U. S. Marine Hospital Service.

On her return trip a case of fever occurred which proved to be undoubtedly typhoid. Several passengers suffered

from enlarged glands. The examination of the male passengers was made by DR. LUMSDEN in the smoking room of the steamer as a matter of expediency and with their consent. The women were examined in their staterooms by DR. AGNES WALKER and in many cases not even the skin of the body was exposed. The newspapers however harangued most vehemently against the exposure and indecency placed upon these people by DR. KINYOUN in the barracks and sheds provided by him. The man, who created the greatest uproar, was examined in the ship surgeon's private room. The reports, that the Doctor contemplated resigning, would be forced to do so, had asked for a change, had been censured by the Government, etc., were as false as the above charge and as much a surprise to him. Such premeditated falsehood is beyond credulity except in San Francisco. That there is and has been made a desperate attempt to have him removed is most apparent, ordered no doubt, by railroad interests through willing tools the Governor, the politician and the local press. This further evidence of direct and deliberate falsehood is a matter of wonder. At first we were shocked and filled with disgust; but now such statements are simply amazing, especially when we consider that these papers are edited by persons supposedly respectable and upright.

THE MEETING OF THE SAN JOAQUIN VALLEY MEDICAL SOCIETY.

The semi-annual meeting of the San Joaquin Valley Medical Society was held on the 9th of October at Visalia. In many respects it was a success, but possibly not up to the usual standard of this excellent but young organization.

The discussions, the best index of the energy and worth of a society, were direct, well considered and full of excellent suggestions in theory and practice. The attendance was quite good and several new members were added to the list. In the evening a delightful Spanish supper satisfied the inner man and immediately thereafter, under the guidance of the inimitable toastmaster, Henry Hildreth, the mind was equally replenished with eloquence, wit and laughter until a very late hour.

A WARNING AGAINST CHINESE EMPLOYEES AND THEIR GOODS.

In view of the recurrence of cases of plague we deem it advisable to urge physicians to warn their patients of the danger of employing Chinese cooks, of using their products as cigars, candies, manufactured goods, their laundries, etc. This is important to prevent contamination, because of the well known attempts of these people to hide their sick and to prevent proper attendance upon them. The period of incubation in the bubonic form of plague is slow and many would be able to do light work, especially in the laundries, before they would be fully incapacitated, yet at a time when they could easily spread the disease. This danger has been emphasized in the case of October 5th, a cigar maker, and that of the 14th, a manufacturer of ladies underwear.

NOTES.

Changes in Colleges and Hospitals.

Dr. Samuel O. L. Potter has resigned from the Board of Trustees and from the Chair of Theory and Practice of Medicine and Clinical Medicine in the College of Physicians and Surgeons of San Francisco, and has severed his connec-

tion with that institution, of which he was one of the incorporators.

Dr. Driesbach Smith has resigned his position on the medical staff of the State Hospital for the Insane at Napa and accepted a position with Dr. Robertson at Livermore, Cal.

Dr. Beverly MacMonagle has been elected to the Chair of Gynecology in the Medical Department of the University of California.

SOCIETY PROCEEDINGS.

SAN FRANCISCO COUNTY MEDICAL SOCIETY.

Regular Meeting, Tuesday, Sept. 18, 1900.

RICKETS.

Dr. E. E. Kelly, the President, occupied the chair.

Dr. Wm. Fitch Cheney read a paper, "The Etiology and Symptomatology of Rickets."

W. F. Cheney: The writer held that rickets affects not only nutrition of bone, but all the soft tissues of the body, and considers this to be due to a deficiency in the fat in the food. If proteids and fat are both deficient the probability is greater that rickets will develop, and the probability of the disease is still greater if there is an excess of carbohydrates, a condition frequently seen in children fed on condensed milk. Marked sweating of the head during sleep at night is a symptom of importance, and in addition to this delayed dentition, night restlessness, and constipation are to be considered as symptomatic. The rosary, delay in closure of the anterior fontanelle, and square-shaped head are evidences of the development of the disease. Flabby ligaments and muscles and the protuberant abdomen are also evidences of the disorder. This disease is one of the great predisposing causes of convulsions, and laryngismus stridulus is usually due to it. Prevention of bony deformity is sometimes possible if the disease is early recognized.

Dr. H. M. Sherman read a paper, "The Etiology and Development of Deformities of the Skeleton in Rickets."

H. M. Sherman: He said that he would confine his remarks to those cases found in this State, omitting the severer forms as found in the eastern states and in Europe. Deformities of the skull are common, that most frequently found is the flattened vertex and depressed anterior fontanelle; next is the flattened occiput due to prolonged recumbency. Deformities of the thorax are due to the muscular force, atmospheric pressure and gravity. The character of the child's deform-

ity depends upon whether it has rickets earlier or later. Ordinarily the deformities of the thorax are symmetrical. Scoliosis is regarded by the writer as a deformity dependent on the rachitic thorax. The deformities of the trunk and upper extremities are not of much surgical importance, as surgical methods cannot be applied for their correction, while the deformities of the lower extremities demand surgical intervention because they are frequently extreme and interfere with the function of the part. Coxa vara is often probably a manifestation of late rickets. Bowlegs were considered and their cause, and genu-valgum and genu-varum described. Flat foot is a common condition in these children.

Dr. S. J. Hunkin read a paper, "The Treatment of Deformities Due to Rickets."

S. J. Hunkin: The writer said briefly: In the vast majority of cases the surgery of rachitic deformities has relation to changes in the tibia. There are three plans of treatment, viz: expectant, mechanical and operative. The first relies on the efforts of nature assisted by hygienic and medical means, and it is sometimes successful in the young, and where the femora and humeri are the parts to be remedied. The second plan of treatment is divided into ambulatory and recumbent, the former of which is condemned, and the second does not compare favorably with operative means with the patient in the recumbent position. There are three operative procedures: osteoclasis, osteotomy and osteoectomy. Osteoclasis is the simplest operation, applicable in the majority of cases especially where the deformity involves most of the shaft of the bone or where the summit of the curve is not close to a joint. The instrument preferred by the author is the osteoclast of Grattan, applying the force at the greatest convexity, believing that reposition can be obtained earlier, and with less liability to twisting of the bone. Osteotomy is performed with the regular osteotome, the leg supported on a sandbag, the soft tissues cut through to the bone with the osteotome; the bone cut through about $\frac{3}{5}$ of its circumference, when the proper reposition may be made manually. Osteoectomy or osteostomy consists of an open incision through which a wedge-shaped piece of bone is removed with chisel and mallet from the convex surface, periosteum and skin being closed separately and a plaster of paris splin applied.

Dr. E. G. Frisbie read a paper, "The Diagnosis and Treatment of Rickets."

E. G. Frisbie: The author called attention to the occasional co-existence of scorbutus and rickets, and that the latter may be differentiated by the absence of the intense pain in the region above the epiphyses, and if teeth are present, by the absence of ulcerative stomatitis. Rachitis may be differentiated from acute rheumatism by reason of the less acute pain and absence of any considerable fever and joint swelling; from Pott's disease by the longer spinal curvature and less spinal rigidity and from osteomalacia the differential

diagnosis is often impossible. Treatment of rickets should consist of hygienic, dietetic and medicinal measures. Since most of these cases are among the poor it is essential to see that the hygienic principles are followed; diet is important, as a prophylactic and a remedy, and in the breast fed infant attention must be paid to the diet of the mother. Artificially fed children should be fed on modified cow's milk, while for older children an abundance of fresh butter on bread and more cow's milk should be used. Codliver oil, phosphorus in dose of 1-200 to 1-100 grain for children 2 to 6 years old, less for younger ones; and anemia syrup iodide of iron.

Dr. R. D. Cohn: Dr. Cheney has given us a very complete symptomatology of the disease under consideration. He has made no reference, however, to one very frequent accompaniment of rickets, and that is zonular cataract, the form most common in children and usually due to rickets. This is not the occasion to enter into a discussion of the various theories proposed regarding the mode of development of zonular cataract. It is sufficient to say that it is almost always bilateral, and that, as its name implies, consists of an opacity of one of the zones of the lens, namely, one of the middle zones, the center and cortex remaining clear. As embryologically the various layers of the lens are formed successively, the innermost first and the outermost last, the opinion prevails very generally that during that period in which this middle layer forms nutritive disturbances of an unknown character lead to the clouding of this particular layer. Dr. Sherman has stated that constitutional rickets almost always manifests itself after birth and that he has seen but one case of congenital rickets. As regards the eye, however, cataract in rickets is in a large percentage of cases congenital. Some go so far in fact as to maintain that it always is, and base their view on the embryological grounds above mentioned. They assert that as zonular cataract does not cause total blindness, its presence in children born with it, is often not suspected or detected until some years later when greater visual activity is required of the child. As Dr. Cheney emphasizes the great importance therapeutically of recognizing rickets as early as possible, the expediency of examining the eyes in every suspected case is evident.

Dr. A. W. Perry: I understand Dr. Sherman to maintain, although not to say, that all deformities of the chest in children are caused by rickets. It is my understanding that these pigeon breasts are caused by obstruction to breathing by enlargement of the tonsils and adenoid in the pharynx. I have found in these cases after the obstruction had been removed, the deformities of the chest would almost, if not entirely, pass away.

Dr. H. M. Sherman: While Dr. Cheney may be right in saying that not every baby, who has no tooth by the end of the first year is rachitic, still the general opinion is that a child who has no tooth by the end of eight

months is pretty certainly rachitic. Moreover, I consider irregularity in the order of the eruption of the teeth as a more certain sign than delayed eruption. Attention has been called to the occurrence of transverse striae on the permanent teeth as indicative of phases of nutrition in infancy, for it is during the time that the child is living on milk that the permanent teeth are formed up in the jaw. I deprecate meat juices and broths, which have been advised by Dr. Frisbie. They are not nourishing but may crowd out nourishing things. Soups can be considered as ingenious devices for getting the taste of more meats than we can eat, for it is a taste that appeals to all human beings, and it is the taste that passes over into the soup. Phosphorus is an agent of variable value. In one case it was of great definite value, sometimes it has been found of a certain amount of value, but usually the effects of its administration are not observable; it is best given in oil. I was interested to hear of an ocular evidence of rachitis and will have all rachitics, who are admitted at the Children's Hospital in the Orthopedic Service, examined for this condition. In response to Dr. Perry, I am obliged to consider that all deformities of the chest are rachitic. That children are benefited by the removal of adenoids is true, but the adenoids and enlarged tonsils could not cause thoracic deformities, for while it is evident that they do take up room in the throat, they do not so obstruct the passages that the child cannot get enough air by opening the mouth. Barlow has pointed out that the aperture of the glottis is small in rachitic children and air cannot enter the glottis as fast as the chest walls expand, and the thoracic bones consequently yield. But I cannot think of a chest, that has developed deformity, and was not rachitic, and this is partly because rickets is the general expression of any general dyscrasia of the child, whether it comes from bad food or bad environment, or bad hygiene, or diseases; anything in fact that disturbs the child's nutrition is apt to produce rickets, and it does produce it in a large amount, for European figures that state, that 80 per cent of the clinic children have rickets, do not overstate that case for San Francisco.

Dr. S. J. Hunkin: The great surprise to me this evening, is, that in the etiology, no mention has been made of race, for it appears to me that race plays a very large part. Surely two-thirds of the bad cases that are presented to me are children of either the dark skinned Europeans or negroes; probably the feeding in these people cuts some figure, but hardly all. I differ from one of the gentlemen who said: "Rickets is a disease of poverty," for outside of the apparent race predisposition, I surely see as many cases in the rich as in the poor; even the question of sunshine and hygiene does not seem to me so important as it did some years ago: cases appear as frequently in children whose parents live under good conditions, as among those who do not. Feeding plays the larger part.

Evidence of rickets may be noticed in practically all children who are raised on artificial food, and perhaps in the majority of children not nurslings.

CALIFORNIA ACADEMY OF MEDICINE.

Tuesday, Sept. 25, 1900.

The President, Dr. Montgomery, presiding.

Dr. J. Henry Barbat presented the following pathological specimens.

UTERINE FIBROIDS.

The first specimen was removed from a woman 48 years old, referred to me for operation by Dr. Mohun, had been suffering for four years with intermittent pains in the back, which had become unbearable for several days previous to her consulting a physician, and had assumed a bearing down character. Her menstruation had been regular every month, was rather free, and was accompanied the last time with a watery foul smelling discharge, which continued after the menstruation ceased. Examination showed a well nourished woman with a very large pendulous abdomen, through which could be felt a mass, which reached as high as the umbilicus. Per vaginam a tumor ten centimeters in diameter and globular in shape projected from the cervix, it was rather soft in consistence and bled slightly on handling. The finger could be passed freely around between the growth and the cervix showing that it must be attached above the internal os. A diagnosis of strangulated fibroid was made and the patient operated on two days later. I removed the mass in the vagina by morcellation as high as I could reach, and as there was still a large tumor present in the abdomen, it was opened in the median line and a complete hysterectomy performed. The specimen shows a fibroid uterus with walls from two to three centimeters thick and the pedicle of a myoma projecting from the posterior wall near the right cornua. The cervix presents a ragged inflammatory appearance probably due to its pressure against the fibroid mass which projected through it. The strangulation of the tumor appeared complete at the time of operation as not one drop of blood followed the morcellation, which was afterward found to have been carried up to the uterine wall on one side. The cause of the strangulation was not discovered but was probably due to the contraction of the uterus in its endeavor to get rid of its unwelcome occupant.

CARCINOMA.

The next specimen was taken from a Mrs. E., aged 34 years, who had been taken sick 36 hours previous to the operation with all the symptoms of an acute attack of appendicitis. She had been enjoying good health, but was losing flesh for some months previous to this attack. The appendix was found congested and swollen, and a round mass three centimeters in diameter and about two centimeters thick was discovered in the wall

of the cecum near the base of the appendix. The peritoneum over the growth was congested and there were a number of vascular bands passing across from the mesocecum to the neighborhood of the tumor. While the present attack was apparently acute the pathologic processes found seemed to point to a much older beginning, and as the growth had a very ugly appearance and suggested carcinoma, it was decided to remove it. This necessitated the removal of the cecum and ten centimeters of the ileum, in order to make an anastomosis, which was done by means of a Murphy button on the 10th day. The microscopic examination of a piece of tissue removed from the center of the growth showed it to be a carcinoma.

ANGIO-SARCOMA.

The next specimen was removed from a child seven months old, who at the time of birth presented a nevus one a half centimeters in diameter situated at the level of the fifth dorsal vertebra about three centimeters from the spine. The nevus did not increase in size until the child was four months old when it began to increase in diameter and also became raised from the skin. There was no pain until the surface began to ulcerate, about a week before the operation. At the time of operation the growth was fully five centimeters in diameter at the base and projected two centimeters from the surface, it was soft and painless on pressure. The upper portion had the appearance of an ordinary nevus superficially, while the lower part was normal skin raised by the tumor. Microscopic examination proved the growth to be an angio-sarcoma.

TUBAL PREGNANCIES.

The specimen next presented consisted of both Fallopian tubes removed from a patient who was taken 24 hours previous to operation with severe pain in the abdomen, accompanied by pallor and faintness. She had missed her menses the month before after having been regular for four years, and had felt that something was wrong with her as she had some pain in the pelvis, and thought she might be pregnant. Her physician diagnosed an ectopic pregnancy and advised operation, I saw the case in consultation and as the diagnosis was clear the operation was done immediately. When the abdomen was opened fully a litre of blood poured out containing a number of clots; the left tube was lifted out of the belly and found to contain a large quantity of blood, its fimbriated extremity being completely occluded. It was removed, leaving the ovary which was normal. The right tube was then lifted out and found ruptured near the distal end, it was removed and on opening it a fetus of about three weeks was discovered. The left tube contained fluid blood and a decidua which formed a closed sac at both extremities of the tube. The next specimen was also a tubal pregnancy in which the fetus was not more than two weeks old; the patient's menses had been delayed several

days, and when they appeared kept drizzling for a much longer period than usual. The patient also noticed a sharp pain in the pelvis on the right side, but otherwise felt perfectly well, I diagnosed an ectopic pregnancy and removed the tube, which had not yet ruptured but which was leaking blood from its fimbriated end. A peculiar coincidence was the fact that the patient's sister had died from a ruptured tubal pregnancy several years previously.

CHRONIC APPENDICITIS.

An appendix was shown which was removed from a patient who had suffered for six years with a chronic appendicitis. The patient being a nervous wreck from the use of drugs taken to alleviate pain, and being addicted to the use of alcohol and tobacco in large quantities, and the heart being very weak, it was decided to produce analgesia by means of cocain injected into the sub-dural space. The needle was pushed in between the fourth and fifth lumbar vertebrae until the cerebro-spinal fluid began to flow, when the syringe was attached and 10 minims of a two per cent solution of muriate of cocain, in which 1/150 of a grain of atropin was dissolved, was slowly injected. Five minutes from the time the needle was withdrawn the incision was made, and the operation completed as usual. Eighteen minutes were consumed in doing the operation and the patient was chatting pleasantly during the whole time, he stated that he felt something and when the fibres of the rectus muscle were separated he complained of a pulling sensation, but admitted that it did not hurt. He vomited once during the operation, but not subsequently; and complained very much of headache at the base of the brain within one hour from the completion of the operation. His pulse remained above 100 for seven days and his temperature varied from 99.5° to 102F° for the same period. He was very nervous and required considerable sedative in the shape of chloral and bromide of potassium to keep him quiet. On the whole it was thought he made a better recovery than if either chloroform or ether had been given. While it is as yet a delicate thing to invade the spinal canal for this purpose, we have had no bad results, and when we consider that we use only one-fifth or one-quarter of a grain of cocain, we would scarcely look for any serious effect from poisoning.

CHOLELITHIASIS.

A number of gall stones were shown which had been removed from a girl 26 years of age who had been suffering for nine years with pain in the epigastric region. The gentlemen, who were treating her, attributed all her trouble to some disturbance with the stomach, probably an ulcer, and finally after three months' treatment in bed by dieting and the usual medicines it was decided to make an exploratory incision, as the pains were getting rather worse than better. The surgeons, who saw the case in consultation, inclined to

the diagnosis of gall stones, and the incision was made over the gall bladder. Before the gall bladder was opened a number of small stones were felt through the thickened wall of that viscus. The peculiar feature of these gall stones is that, though there are 24 of them, none are faceted, and at the time of operation it was found that they were all attached to the wall of the gall bladder at different points. They are small, none being larger than one-half centimeter long, and are all rough and many of them have sharp points projecting from their surface. The gall bladder contained no bile at the time of operation and none flowed until seven days after the operation, when a stone which evidently had been blocking the cystic duct, became dislodged and allowed the bile to pass out through the abdominal wound.

LEPROSY.

Dr. D. W. Montgomery reported a case of a white woman who contracted leprosy in San Francisco, who presented herself on November 14, 1899. She was 50 years of age and was suffering from paralysis agitans. She was born in Ireland. Her father still lived and was 80 years of age. Her mother had died three years previously, at the age of 75. On coming to San Francisco in 1870 she married an Irishman, who had lived in Ireland, Boston and San Francisco, and nowhere else. He had died in 1882 from hemorrhage of the stomach. Patient said her husband had never had any blotches on his skin. She had had two children and one miscarriage. There was a group of smooth, glistening, firm, prominent tubercles on the left cheek, and there was a tubercle near the vermilion border of the upper lip, to the left of the philtrum. There was one tubercle on the nose tip and the lobes of the ears were infiltrated and nodular, and there were leucoplasia-like patches on the roof of the mouth. There were tubercles or red maculae scattered over the skin of the upper and fore arms. There was no demonstrable enlargement or tenderness of the right ulnar or median nerves, but the left ulnar nerve was slightly enlarged and very sensitive to touch. The skin of the backs of the hands and to a slight extent of the left fingers, was swollen, smooth, waxy-looking, and had tubercles scattered in it. The sensations of touch and pain were normal in both upper extremities. Both legs were swollen, with red blotches and tubercles in the skin. Microscopic examination was made of the juice squeezed from one of the tubercles, and a large number of lepra bacilli were found. The Doctor stated that he had been informed by another physician that the woman subsequently died as a result of pulmonary tuberculosis. This is the second case of leprosy in a Caucasian that he had ever seen, and he had been steadily interested in the disease during a practice of over 14 years in San Francisco. He assumes from this that while the danger of the spread of leprosy in California among the whites, is not pressing, it must be remembered that leprosy is a disease that slowly and

tenaciously invades a country, the invasion to become appreciable often requiring several generations. In the fulness of time, when many lepra centers are established, the invasion seems to be more rapid. He concluded by stating that leprosy may be acquired in this country by whites, and that all reasonable means should be taken to prevent the spread of the disease.

Dr. J. Henry Barbat thought there was some possibility of the nodes on the skin of this patient being tuberculous, as the patient had died of pulmonary tuberculosis. The similarity of the lepra bacillus to the bacillus of tuberculosis might account for the apparent finding of the lepra bacillus in the tubercles of this patient.

Dr. Philip King Brown said that the bacilli being found in the skin in large numbers would, in itself, be almost diagnostic of leprosy. In post mortem examinations he had found large numbers of the bacilli all through the skin, as well as in the nodules.

Dr. Montgomery said that almost all cases of tubercular leprosy die of tuberculosis. He finds no difficulty in differentiating between the lepra bacillus and the bacillus tuberculosis. The bacillus tuberculosis is very seldom found in cases of lupus, which by the way, is a very rare disease in California.

THE SAN JOAQUIN VALLEY MEDICAL SOCIETY.

Regular Semi-annual Meeting, Oct. 9, 1900.

Dr. W. W. Cross, Visalia, the President, occupied the chair. Upon motion the address of the President was postponed to the afternoon session. (Published at page 344.)

CANCER OF THE LIVER AND PANCREAS.

Dr. T. O. McSwain, Visalia, reported a case of "Cancer of the Liver and Pancreas" and exhibited the specimens. The history was as follows: H., age 64, married, carpenter, of temperate habits, had usual diseases of childhood. Several years ago suffered severely from malaria. On May 3d called at office complaining of jaundice, colicky pains, indigestion and constipation; had been ill six weeks. On physical examination there was marked jaundice, pulse weak and small, temperature 100°, tongue coated; no growth could be made out independent of the liver, which extended five or six inches below the ribs and two or three to the left of the umbilicus; no tenderness on pressure; impossible to make out the primary lesion. Gave calomel in ½ gr. doses every half hour till 5 gr. were taken to be followed by phosphate of soda in dram doses each day. This treatment seemed to reduce the size of the liver and the jaundice disappeared to a considerable degree, the stools, which were clay colored and very offensive, were not changed. Two days later he returned when Dr. Cross saw him in consultation. The diagnosis of cancer was confirmed and he was ordered to return within two days. The liver and his condition was

about the same. He was then put to bed and the treatment continued until within a few days of his death.

Dr. J. D. Davidson, Fresno: I would like to report a case somewhat similar of a man, who came to the County Hospital several months ago. Three weeks previously he had become overheated, while at work; his abdomen was distended; liver enlarged; suffered considerable pain in the side; there was fever and jaundice. Absolute diagnosis impossible. At autopsy liver was found to be four times its normal size with many adhesions between duodenum and head of the pancreas. Gall bladder greatly distended, white in color and filled with a clear viscid fluid.

POISONING BY PINK PILLS AND TREATMENT.

Dr. J. B. Rosson, Tulare, reported a case of poisoning by "Pink Pills." The patient, a small child had partaken of two-thirds of a box of "Pink Pills" for fever. Shortly there appeared edema of the glottis, difficult breathing with mucous rales resembling a catarrhal pneumonia and finally spasms. The treatment aimed first to relieve the edema of the glottis, which was very marked and prevented the ingress of air. A solution of suprarenal capsules was applied to the swollen tissues and the breathing at once became easier, the spasms seemed less in severity and the whole condition ameliorated. The application was made frequently until poisoning was feared when apomorphia was substituted in 1/64 grain dose hypodermatically, until it produced vomiting. The general spasm was markedly relieved; also that of the glottis and the bronchial symptoms gradually subsided. The apomorphia was continued whenever the spasm threatened in less frequent and smaller doses for two days. In this connection Dr. Rosson also stated that apomorphia had proven in his hands the very best remedy for hysteria, far better than cold, bromides and the remedies usually advised. In strychnia poisoning also he had witnessed some remarkable cures from convulsions by the use of apomorphia. In a very large number of experiments on dogs he had produced convulsions by varying doses of strychnia, and when the convulsions were marked and violent he would give a dose of this antidote, when the convulsions would cease at once. The same experiment had been made several times on the same dog with the same prompt results. Only one dose, varied according to the size of the dog, was sufficient, the average was 1/16 of a grain.

Dr. H. Hildreth, Delano, inquired what dose Dr. Rosson had administered in his case and what dose did he consider excessive? He had used 1/10 and ½ grain of apomorphia in a child one year old suffering from convulsions that occurred every five minutes with immediate relief.

Dr. G. A. Hare, Fresno, would not risk so large a dose in children. He had given 1/10 and ½ in alcoholism but thought that many could not stand the larger doses. He used 1/100 with similar results. He had much

respect for large doses and was careful how he used it in severe delirium, although he had had much experience with it in these conditions.

He had used it in small doses $1/30$ of a grain hypodermatically as a hypnotic and in many cases it had acted remarkably well.

Dr. W. N. Sherman, Fresno, had never had any experience with the drug as a hypnotic, but in bronchitis and allied conditions it had produced the same effect as codein and paregoric, quieting and soothing the cough admirably.

Dr. Hildreth had not had an extensive experience in the treatment of children, and was not therefore competent to give an opinion, but thought that in the case of the child, who had taken the pink pills, the doctor had begun at the wrong end in his treatment. He thought that the capillaries should have been relaxed at first, as had been done by the apomorphia, then the spasm of the glottis and the convulsions would have as quickly subsided. For we know how little it takes some times to relieve a spasmodic condition, for instance in spasm of the sphincter of the bladder the passage of a cold sound is often sufficient. The edema would have indicated the use of an astringent. A cathartic should have been administered to remove the pills. Two years ago a paper was read before this society on the treatment of tuberculosis and the use of creosote was spoken of very favorably, especially in large doses by my friend Dr. Rosson. I have found great difficulty in administering it in such doses. In 1873 an instance occurred to me while practicing in Texas, and at a time when I was scrambling for my next meal, that led me to use large doses of creosote. A man called suffering from prickly heat and wanted to know if I could cure him, I lied to him, as I thought, and searched through my limited supply of drugs. The only thing I found, which I thought would answer the purpose was some creosote, which I mixed with a quantity of mutton tallow, 20 minims to the dram, and ordered him to rub it into the skin over his neck and back. He reported next morning that he was well. The practical application I desire to make of this is in the treatment of tuberculosis, where the patient will not tolerate creosote internally I order an ointment of lanolin and have it rubbed in well daily. It has acted well in many cases and the effect has been very pleasing.

Dr. D. R. Rogers: Two years ago I used apomorphia in a case that was convalescent from pneumonia. The patient, a man aged 23 had been given it to stimulate expectoration. The mixture contained three grains of apomorphia in two ounces, a dram at a dose. It was given by the mouth. After seven doses he experienced great difficulty in breathing with a respiration of ten per minute. It had no effect on the stomach. Gave no relief to the expectoration, it did not stimulate it and acted entirely contrary to what was expected. There was rapid collapse and much stimulation was needed to relieve him.

Dr. H. Hildreth: Lobelia in former days was used to produce the same effect as is secured by apomorphia.

Dr. J. L. Combs, Visalia: Had used apomorphia in many cases of alcoholism with convulsions and had never had any bad effects. In his practice one-half grain gave immediate relief, quieted the stomach and produced prompt emesis. In the same patient at one time he gave one grain at a dose, which gave results similar to those of lobelia. The patient has not been drunk since. It no doubt is the basis for the Keeley cure. In another experience a brother practitioner gave apomorphia to vomit a would be suicide from opium. One tablet caused him to vomit the laudanum and the patient immediately recovered. Apomorphia is one of the best remedies to relax the system, to relieve the stomach if prompt emesis is wanted.

Dr. J. T. Trowbridge, Fresno: Reported a case seen in the County Jail with spasms, which were supposed to be simulated. No test proved of any avail in determining whether the case was real or not and gave one-half grain of morphia in two hours, gave a quarter two hours later and a similar dose two hours later. Having obtained no results from the morphine, still being suspicious of the man, gave one-tenth grain of apomorphia. Absolute coma shortly intervened. Respiration was three or four to the minute, there was scarcely any breathing at all. After working strenuously for several hours he recovered.

Dr. T. E. Taggart, Bakersfield: For several years had experimented with apomorphia in bronchial and lung troubles. Produced vomiting readily with apomorphia which he found useful in alcoholism. Apomorphia will not act in opium narcosis. It loses its effect and is at times dangerous. In regard to Dr. Rosson's case the suprarenal capsule is effective in rhinitis, it relieves congestion and is a good hemostatic.

Dr. W. W. Cross, Visalia: Apomorphia does not act as a result of its effect upon the stomach, but derives its force from its effect on the nerve centers in the brain. The relaxation comes from the reflex vomiting. He has given it frequently in dysmenorrhea, where morphine in continued doses was liable to produce a habit. In these cases apomorphia is free from danger and will not produce the habit. In the combined action of morphine and opium we have had no experience. In a case of tuberculosis had given six grains of morphine without effect. There was no absorption, hence any effect possible would be very slow in its production. Usually he gave $1/10$ of a grain of apomorphia in practice, but had given a child $1/5$. It produced severe vomiting. Has never seen depression from its use.

Dr. G. A. Hare, Fresno: Uses apomorphia in a great many cases for its mental impression. It produces in many a dislike for alcohol. It is the real Keeley cure, and is its secret. There is no gold or at least there is no appreciable amount of it used. In many

cases they gave liquor and then used apomorphia and the cure was simply one of suggestion.

Dr. Rosson: I have found apomorphia a most excellent remedy in hysteria. In a case of carbolic acid poisoning where the patient was seemingly semi-conscious, pulled her hair, and gave vent to various hysterical symptoms a hypodermic injection of 1/16 of a grain caused rapid recovery with most effective vomiting. He had treated fifty cases of this trouble and in all the apomorphia was promptly effective.

Dr. J. L. Carson, Bakersfield: Had a similar case of carbolic acid poisoning, in which the acid was spilled over mouth, face and neck, and patient was very hysterical. He gave 1/10 of a grain of apomorphia. The patient vomited, became, quiet and went to sleep.

TUBERCULOSIS.

A paper on Tuberculosis by Dr. T. M. Hayden, Fresno, was read by title.

THE MEDICO LEGAL STATUS OF THE EPILEPTIC.

This subject was considered in general discussion which was opened by Doctor F. A. Combs, Visalia, who said:

During a practice of 45 years he had had a great deal to do with epilepsy. He had endeavored to investigate the causes of this disease, its aspect toward insanity and the general condition of the epileptic. He had made many autopsies on the brain and failed to find any abnormal condition of that organ. So deeply veiled in obscurity is the cause of this condition that pathologists have not arrived at any definite conclusion. In medico-legal history throughout its whole extent we find epilepsy a prevalent condition. Among the Greek writers it was described as a demoniacal disease, and down through the ages the convulsions seized upon people without discrimination of station or race. Many illustrious men have been its subjects. Napoleon was an epileptic; so was Cæsar; and in scriptural history the young man, who was possessed by the Devil, was an epileptic. To the present time no cause has been found. Is it an affection of the brain? What is the causative condition? We receive no light from history. The work of the pathologists is productive only of a similar result. Study and dissection are necessary to find the cause. A peculiar feature of the disease in his experience was its periodicity, which was always marked. It is one of the most fruitful sources of insanity. In many cases it is the precursor of insanity and our courts are filled with cases that have committed crimes while suffering with this disease, and some are condemned to death for murder under such circumstances. The question that interests me deeply is whether these cases are subject to legal responsibility. The calm and indifferent epileptic before the Court gives, in his very calmness, an evidence of epilepsy. Our duty in these cases is to incarcerate or to confine

them in a hospital for insanity. Under the old English law an epileptic was hanged if he committed murder. Today many men in our own country by such edicts are punished in the same way for the same crime without any just consideration of the medico-legal aspect of this serious question.

Dr. H. Hildreth, Delano: Had met two cases of epilepsy, that had never shown any criminal intent, in which the disease was due to injury to the skull. Because these patients had epilepsy they did not necessarily have insanity. Epilepsy is usually considered under two heads, petit mal and grand mal. Petit mal grows slowly and through development often leads to infringement of the law. We do not understand the condition nor can we control it. There is no reasonable ratio of cure from any remedy. Many live a long life, die and leave great names though epileptic. The criminal epileptic, he who suffers from vagaries of mind and is malicious, should be treated differently and is different. He is never a safe member of the community and should be removed from it gently, without shock or disgrace, and his condition in life made as easy as possible.

Dr. Mathewson, Visalia: We have all had more or less experience with epilepsy. The cause of the disease and its results need careful study. The great question is, what shall we do with him. He is dangerous, yet not always insane because he has a fit. Two-thirds of these cases in time become insane. Some have convulsions from forty to fifty years and they cause no trouble. To place these people in an asylum is not good, for they become most troublesome. They combine, scheme and work injustice to other inmates. In the State of New York many of the hospitals have special wards for epileptics. With regard to the convulsions it is merely an indication of the disease. When these patients are having their fits they are more quiet and tractable, but when the fits are delayed they are very irritable and troublesome. This accumulation of force and nerve energy in the quiet period must be relieved, the tension finally results in an explosion. Injury to the skull sometimes leads to simulation or feigning of epilepsy. Another point in the care of these cases, verified by experience, is that much exercise and limited diet causes a decrease in the attacks, especially where due to habit, which, if yielded to, produces more frequent and more severe attacks. The treatment of the disease is unsatisfactory. Most of it simply delays the attacks. Sometimes they are gradually relieved by natural causes. The case of the epileptic is not entirely helpless. Death is preferable. Historical accounts are not always reliable in narration of the disease. It can be hardly entertained that cases of "possession" were epileptic, for mind cure, spiritualism, mesmerism are closely related to this condition. The mind of man, wonderful as it is, has not solved this problem. The main idea in the treatment is what shall we do with them. We cannot en-

tirely free them nor can we restrain them beyond measure.

Dr. W. N. Sherman, Fresno: We should be more considerate and just than to condemn all epileptics as degenerates or criminals, because they suffer from epilepsy. It should possibly be considered a form of insanity. Many cases of great men may be considered epileptic, but they were not degenerates nor were they criminals. It is an intricate subject and not understood, hence we should distinguish between these diseased conditions. In children where the attacks are frequent there is seemingly a tendency to idiocy or criminality. Why is this not often the results of treatment as well as disease? Does not a saturation of the system with bromides weaken it? Some claim that the brain is not affected. Oftentimes the cause is not discoverable. Others hold that the paroxysm arises from the nervous system by interference with the circulation in the brain. This is a reasonable theory, as the effects are oftentimes ward off by dilation of the blood vessel, by nitrite of amyl, etc., which relieves the tension and prevents the paroxysm. Modern students hold that this condition is sometimes due to an excess of uric acid in the system, which acting on the nerves and in the brain causes contraction of the blood vessel and the convulsion follows. The petit mal and the grand mal in many instances do not produce serious lesions and these cases should be classed with the same degree of caution as those of insanity. Some cases no doubt are degenerates through epilepsy; others reach an extreme degree before showing any such tendency. Others go about as usual in life, performing ordinary duties, and are not degenerates or criminals in any sense of the word. Among women the ovaries were supposed to be the cause, but their removal proved of no result in many instances.

Dr. H. Hildreth, Delano: It seems to me that the average practitioner is densely ignorant in this matter, which should be given very careful study. Authors usually go too deeply into the pathology of the subject, and do not consider sufficiently the medico-legal aspects or the relation of the disease to insanity. The question before us is the medico-legal aspect of the epileptic, which necessarily involves his responsibility under the law. When the attacks occur once or twice a month their status before the law should certainly be established, for if murder is committed, he is merely considered an epileptic, and usually goes free. In discriminating between petit and grand mal some one of the members says that it develops under strain, anger or external irritation, and one also urges the uric acid theory, which I believe is upheld only by the promoters of some new drug. In epilepsy there is a lack of physiological balance which is unexplainable, according to our best knowledge. It is not a neurosis, it is a something, a thing similar to that which forces this man to do one thing and that another. There is no brain lesion, but this something that drives one man to drink, another to do some other

deed is just as pregnant with responsibility as the epileptic. The responsibility in each case is the same, but under the law the drunken man is held and the epileptic is acquitted. A drunken man is allowed his liberty, gets drunk again and again, and the community, to my mind, is responsible. The drunkard is impelled by this something, does not see things as others do, and is in this respect irresponsible. His condition is no better than the average case of petit mal, which condition it is hoped somebody will explain.

Dr. W. W. Cross, Visalia: In such questions as this expert testimony becomes of very great importance to the profession and public. The relation that epilepsy bears to criminality is well explained by the numerous cases of degeneracy that show a similar phase. Many instances of deliberately planned crime are excused on the ground of epilepsy. Dr. Gray speaks of the period of petit mal, declaring that it may last a moment, a second, or longer; that the grand mal often covers a period of months or longer. This trance or period of unconsciousness is considered one of irresponsibility by the New York courts. Dr. Gray declares that they should be under restraint or watch. The law of the State deals with the patient, his action, and not the doctor. In many instances these patients know what they are doing, and the history of the individual case in discriminating in the legal aspect of the subject should be carefully considered.

Dr. Mathewson, Visalia: The insane epileptic must be examined and looked after as freely and as carefully as an ordinary case of insanity. If one man had an epileptic fit five years ago, he is just as much a subject of care as though he had a fit every day. When the fit wears off he is sane, but not so when in the convulsions. When the epileptic is suffering in the convulsions, though he is seemingly unconscious, he may strike or fight, and if any crime is committed he is not liable. If he is only a neurotic, or from a neurotic family, he is not excusable, and must be punished. It is his condition just at the time the deed is committed that should be compared with his usual conduct before the criminality of the act should be determined. Drunkenness and epilepsy are forms of insanity; though the drunken man and the angered man cannot be considered irresponsible. From such habits come our cases of insanity, and especially from our neurotics, even though this may only show early in the decedents. The question "what shall we do with the epileptic is most important? In this country they are well provided for, and the best results from treatment are obtained in those cases where they are allowed to earn their living. To allow them to be at large is dangerous.

Dr. T. E. Taggart, Bakersfield: What is hysteria, melancholia, anger, etc.? Do these conditions grow, get worse, and what are they?

Dr. Mathewson: All neurotics as a rule go downward. They rarely improve. Asy-

lums should be made to control and care for these cases.

Dr. H. A. Hare, Fresno: Has always been deeply impressed with the largeness of this subject and the tendency shown to inherited defects. The problem is one of practical importance. If anything is shown in vital statistics, it is larger increase of epilepsy, insanity, criminality, etc. One of the causes for this condition, though inheritance is a positive factor, is found in our school system, and the family physician should consider himself the guardian of the family. Education is directly productive of these conditions. In tubercular children inheritance is of no great consideration. The children can be raised to health by care, proper food, and proper hygienic surroundings. The same cannot be said of the effects of our school system. Where many come from healthy parents, many others come from weakened parents and diseased conditions which act as irritants. In the physical development, therefore, of the child lies our only hope and safeguard. The doctor must be the master of the situation. He must not allow children to be forced in their studies, to enter school too young or to be overworked at this most trying period of life. This problem cannot be ignored, and must be met on the firmest ground, no matter how severely the wishes of some parents may be opposed. By a lessening of the nervous tension, thrown on these little ones, a means is attained of warding off degeneracy, criminality and epilepsy. Further agitation is necessary and should be earnest. Public sentiment must be changed or moderated on the school question, marriage of diseased people must be discouraged, and the children must be trained from the beginning in the physical more than in mental culture.

Dr. F. A. Coombs: The germ, the principle, of heredity is deposited in the embryo of the physiological degenerate and is transmitted through his life until some circumstance determines insanity, either through epilepsy or some other cause. An epileptic, in my opinion, is an insane man, and is irresponsible. It is the inheritance and the conditions of the man that requires our attention. There are three points bearing on this subject that are important in the determination of the punishment, heredity, epilepsy and the motive. Some men will not destroy life; they will not have a motive; another is cool, deliberate and is of a homicidal nature. He will study for months how he will best perform the deed. In other cases the intent is so obscure that no one will discover it. This is especially true of the epileptic.

Dr. Mathewson: This is a delicate question. When any person loses control of or yields to this quality of mind he degenerates. If he is a thief, he will commit theft and do it again and again. His moral sense, his will power is inhibited, weakened, and the personality of the man is lost. This weakness and loss of power is the point to be removed and to be recovered from. The question of education and of society in its present condition

is an all-absorbing one. The cultivation of the memory, as advocated in our public school system, over the power of reason, cramps the mind and leads to very bad results. If, as some have said, to have one thing done completely in a day is too much; how bad must be our present system, which aims to accomplish so much? The hours of school each day and the hours of school each month are wearing and strain too greatly the little minds. The present systems will not compare in any way with those of the past. They should be vigorously condemned, and it is unfortunate that the medical profession are not heard in the matter. It is homicide, and the blame should rest where it belongs. The standard of education for all must be lowered; the mind is burdened with unnecessary matter.

APPENDICITIS A SURGICAL DISEASE.

Dr. J. D. Davidson, Fresno, read a paper entitled, "Appendicitis—A Surgical Disease." [Published on page 347.]

Dr. T. E. Taggart, Bakersfield: Dr. Davidson has given us a very complete synopsis of this phase of the question. I am not so enthusiastic over operative measures in the first attack as before. I have had several cases that have been under observation for some years. I am inclined to think that immediate operation gives best results and have never seen a case where medical treatment has been of any avail. Have seen cases of so-called conservative treatment which turned out badly. This form of treatment is simply cowardice.

Dr. J. B. Rosson, Tulare: It is criminal to treat appendicitis medically. In recurrent cases we have rupture, with peritonitis and death. Operation in first attack is almost always necessary. Every physician should be prepared to do it. Recurrences even before any sign of peritonitis are dangerous. In one case recently under my care operation was advised but deferred. In the meantime morphin was administered to relieve pain which so quieted the patient that the diagnosis was considered doubtful by the consulting physician. The operation was again postponed and the condition relieved by morphin. Patient grew worse, and when the operation was done the abdomen was found to be full of pus and only the most skillful and thorough measures saved life.

Dr. H. Hildreth, Delano: There seems to be only one side to this question. Every pain in the bowel is not appendicitis. Appendicitis is a misnomer. It is a peritonitis localized or general. Some cases will yield to treatment without operation.

Dr. W. N. Sherman, Fresno: Bases his opinion upon personal experience and the authority of Nothnagel and other authorities. A great diversity of opinion exists in both countries, as to the methods to be pursued, and if an operation is demanded, as to when it shall be done. There is in many cases a great deal of suggestion. Medical treatment has been largely neglected. Under this form I have not lost a case in twenty-five years.

Only one case, a neglected one, went to pus formation. In recurrent cases medical treatment has always been favorable when seen early in the attack. If neglected however they will suppurate.

Dr. W. W. Cross, Visalia: If patient is to be treated conservatively, and with opium as suggested by Dr. Sherman, he must be seen early. The opium treatment when used indiscriminately is an injustice to the patient. If there are any fecal concretions an abscess will form which should be opened. All patients of mine operated on between the attacks recovered; also where rupture had occurred and infection was not overwhelming. If an operation is to be done, do it at once. If it is done within the first twenty-four hours of the attack, no abscess and no adhesions have usually formed and the latter if they exist should be broken up thoroughly in order to secure the best results.

Dr. G. A. Hare, Fresno: In twenty-four hour cases the patient does not realize his condition. The disease must progress before he will ordinarily submit to operation. Within that time especially in second attacks an explosion occurs, a rupture, the appendix perforates, the abdomen becomes infected and the patient will not recognize it. Many cases that are treated medically recover from the first attack, but in trusting to this, valuable moments are often lost for saving life and the symptoms are hidden by the treatment and delay, and the seriousness of the case is not made manifest to either physician or patient, and when it does the patient is frequently beyond all aid. A diseased appendix should be removed early in all cases, even as a matter of routine when other operations are done. The retention of the appendix is bad because of the possibility of disease and infection; its removal is good surgery. Removal by the inversion method is a little difficult, but lessens the danger of infection and is therefore the best.

Dr. Davidson: Inversion of the appendix, after stripping off the mucous covering, can be done only in a few cases especially where there is no rupture and not many adhesions. By this method a focus of infection is removed and the whole appendix is inverted into the cecum, where it sloughs off, and leaves a healthy condition.

Dr. F. A. Coombs, Visalia: May have had a great many cases, but possibly did not recognize them as appendicitis. In a case in consultation with Dr. Cross the conservative method was followed. Cathartics first, then opium, turpentine emulsion and stupes were faithfully used and the patient recovered.

Number of members 62. The following officers were elected: President, W. T. Maupin, Fresno; First Vice-President, H. Hildreth, Delano; Second Vice-President, J. B. Rosson, Tulare; Third Vice-President, T. O. McSwain, Visalia; Secretary, A. B. Cowan, Fresno; Asst. Secretary, J. D. Davidson, Fresno; Treasurer, T. M. Hayden, Fresno.

Next place of meeting Fresno on the second Tuesday in March, 1901.

SAN FRANCISCO SOCIETY OF EYE, EAR, NOSE AND THROAT SURGEONS.

September Meeting.

The President, Dr. Henry L. Wagner, in the chair.

Dr. R. D. Cohn presented a case of chorio-retinitis with posterior cortical cataract in both eyes, and asked the opinion of the members as to the treatment indicated.

Dr. L. C. Deane said that he had seen the case with Dr. Cohn about a month back, and examining it carefully found a certain portion of the choroid destroyed. The portions remaining appear to be in fair condition. While Dr. Cohn states that the man is gradually losing his vision, Dr. Deane did not think this was due to any progress of the choroiditis. In cases where the progressiveness has ceased, he used electricity. The best electrode is one made of some malleable metal bent in the exact shape of the eyeball so that it would not touch the brow or cheek bone. The negative electrode is placed at the back of the neck.

Dr. F. B. Eaton said he had always been accustomed to treat such cases with mercury and the iodid to the extent which they could stand.

The President said the electric treatment was new to him. He thought iodid the better treatment and would not trust to electricity.

Dr. Deane thought that Dr. Eaton referred rather to cases of the acute form of choroiditis, where the mercurial and iodid treatment was correct. The electric treatment is indicated in cases which have become chronic and quiet.

Dr. Redmond Payne referred to the use of subconjunctival injections of sublimate as used in Paris. He thought the treatment in certain cases is a good one.

Dr. Cohn said he would act upon all the suggestions offered and would give mercurials, as well as the galvanic current, a trial. He expected to accomplish very little with either, and with the President considered the prognosis bad.

Dr. F. B. Eaton presented a case of "suspected sarcoma of the choroid" in a man aged about 45. The sight had begun to fail five months ago in the right eye, and during the past two months had decreased so rapidly that it was difficult for him to see his way, vision being excentric upward. There is an extensive detachment of the retina below and to the inner side, but neither by ophthalmoscopic or oblique illumination is a tumor visible. The tension is considerably subnormal, being about 2. The sight of the left eye was lost 25 years ago, there being extensive anterior staphyloma of the sclerotic and cornea, the sclerotic being much thinned. In the right eye there is also great thinning of the sclerotic, but no ectasia. Dr. Rosenthal had seen the patient soon after the beginning of the trouble, and the appearance

of the fundus of the right eye indicated a sub-retinal growth.

Dr. Deane would ask Dr. Eaton what suspicion he has that the case is one of sarcoma. If it is, it is not advisable to remove the eye, since the left is entirely blind. If it is one of detachment of the retina, rest, etc., are indicated. He did not see a great value in making a differential diagnosis.

Dr. Eaton said that the suspicion of sarcoma is founded on the early examination made by Dr. Rosenthal. The differential diagnosis is very important to the patient. If sarcoma, the eye should be enucleated as it is blind. He would not weigh it against the man's life.

The President suggested that a carefully taken skiagraph might show a growth if present.

Dr. Cohn thought the appearance of the detachment pointed to a sub-retinal tumor. He thought that an exploratory puncture of the sclera in the region corresponding to the detachment is indicated.

Dr. Payne had gained the impression with Dr. Rosenthal that the retina is smooth and well defined anteriorly. It has not the appearance of detachment from other causes than a tumor.

Dr. Payne presented a case of "Retro-Bulbar Injury of the Optic Nerve." Six weeks before, the patient a man aged 45, was struck with some heavy object on the outer side of the right orbit. The tissues were lacerated down to the bone, but the bone was apparently intact. One week after the accident, when first seen by Dr. Payne, the right eye was absolutely blind. There was marked chemosis of the conjunctiva. The iris appeared normal, but did not react to light. Its associate reaction to light was normal. The media and the fundus were normal. Movements unimpaired. There was slight tenderness on pressing the globe backward. All the injured parts have now cleared up, and the bare perception of shadows has been regained. For the past two weeks the papilla has been getting white, and presents the typical appearance of optic atrophy. Dr. Payne thought there was an injury of the nerve within the orbit between the optic foramen and the entrance of the central artery into the nerve.

Dr. Eaton said that he had lately a similar case. A man was hit on the side of the head, and the eye became immediately blind, and later complete optic atrophy was found. This is always taken as an evidence that there is a fracture through the optic foramen. He could not conceive of an injury of the nerve between the optic foramen and the eye ball

that would not show some other form of inflammation.

Dr. Payne thought the absence of early changes in the retinal blood vessels excluded injury of the nerve in the foramen, as in that case there would have been pressure upon the ophthalmic artery which is transmitted with the nerve.

Dr. Redmond Payne read a paper entitled, "The Question of Prognosis of Glioma of the Optic Nerve as compared with that of Glioma of the Retina." The literature of the subject shows great confusion and conflict of opinion. The clearest classification of optic nerve growths is as follows: (a) Those springing from the dural sheath are sarcomata. (b) Those springing from the pial sheath are endotheliomata. (c) Those springing from the neuroglia are gliomata. In both general and special classifications true glioma is indicated as a benign tumor. There is but one exception to this rule, viz: glioma of the retina, which is very malignant. In the opinion of nearly all pathologists primary glioma of the optic nerve, springing from the neuroglia as it does, should be regarded in the same light as glioma affecting the brain, cord, and cranial nerves, where it is conceded to be a benign tumor, and dangerous only on account of the pressure it exerts. The question arises: In what particular respect does glioma of the retina so differ from glioma in other parts that when it attacks this organ its benign character is entirely changed to the clinical picture of a malignant sarcoma? Quoting several authorities, Dr. Payne concludes that glioma of the retina appears to be malignant in exactly the same manner that sarcoma is malignant, that is, that the cells, or toxins from the tumor, are conveyed through the blood current to distant parts. Moreover, glioma of the retina need not necessarily extend back along the nerve to invade the cranium, but is malignant and becomes metastatic in exactly the same way as sarcoma of the choroid. The preponderance of evidence on the part of pathologists favors considering glioma of the retina as a round-celled sarcoma, and it would be better for clinicians to abandon its designation as a glioma.

Dr. Cohn considered that Dr. Payne is correct in refusing to consider his case of optic nerve tumor as unfavorable. Since clinically retinal glioma is a malignant growth, whereas, according to the majority of reports, primary glioma of the optic nerve is benign, corresponds to the fact that histologically the two types are dissimilar as to the benign character of primary optic nerve tumors in general. Vossius of Giessen goes so far as to say that recurrence is rare even after incomplete extirpation.